

**COLUMBIA RIVER BASIN FISH
CONTAMINANT SURVEY**

**VOLUME I
Appendix A**

**STUDY DESIGN FOR ASSESSMENT OF
CHEMICAL CONTAMINANTS IN FISH
CONSUMED BY FOUR NATIVE
AMERICAN TRIBES IN THE COLUMBIA
RIVER BASIN**

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Prepared by

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Region 10

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Final Draft Report

Assessment of Chemical Contaminants in Fish Consumed by Four Native American Tribes in the Columbia River Basin

Prepared For:

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF WATER
OFFICE OF SCIENCE AND TECHNOLOGY
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1.0 INTRODUCTION

1.1 PROJECT DESCRIPTION

The Columbia River Inter-Tribal Fish commission (CRITFC) entered into a cooperative agreement with the U.S. environmental Protection Agency (EPA) in 1990 to conduct a fish consumption survey of the Nez Perce, Warm Springs, Umatilla, and Yakima Native American Tribes. This consumption survey, which was released in October 1994 (CRITFC 1994), was the first phase of a broader effort to determine the role of fish consumption as an exposure route for waterborne toxics among individuals of these tribes. The second phase will use the information from the consumption survey to design, and implement, a sampling program to collect tissue contaminant data from residence and anadromous fish species consumed by tribal members. It is this phase of the project with which this document is concerned. The third phase, which will determine blood contaminant levels of tribal members, has not been initiated. Collectively, these three components should provide the necessary information for developing an exposure assessment for members of the four CRITFC tribes. Information derived from this exposure assessment may then be used by U.S. EPA and others for developing an assessment of health risks to fish consumers in the four member tribes.

1.2 DOCUMENT PURPOSE AND SCOPE

This scoping document was originally submitted in draft form to members of the CRITFC Task Force (Table 1), other tribal representatives, and selected government agencies. The draft document provided a preliminary study design that served as a starting point for discussions that occurred at a Design Conference held on October 19-20, 1994 in Portland, Oregon, at which a study design for U.S. EPA's Phase II CRITFC exposure study was finalized. This document presents the consensus study design developed at the Design Conference and provides the study objectives, rationale, and study recommendations formulated by attendees of the Design Conference. This document is not intended to be a sampling plan or a quality assurance/quality control plan. Such documents will be prepared prior to initiating the field sampling.

TABLE 1. MEMBERS OF THE TASK FORCE FOR THE CRITFC PROJECT	
Name	Affiliation
Jeffrey Bigler, Project Manager	U.S. EPA Headquarters, Office of Water
Rick Albright	U.S. EPA Region X, Water Division
Harriett Amann	Washington Department of Health
Steve Bradbury	U.S. EPA Headquarters, Office of Research & Development
Pat Cirone	U.S. EPA Region X, Environmental Services Division
Dave Cleverly	U.S. EPA Headquarters, Office of Research & Development
Dana Davoli	U.S. EPA Region X, Environmental Service Division
Jerry Filbin	U.S. EPA Headquarters, Office of Policy, Planning and Evaluation
Gene Foster	Oregon Department of Environmental Quality
John Gabrielson	U.S. EPA Region X, Water Division
Clarice Gaylord	U.S. EPA Headquarters, Office of Environmental Equity
Jim Griggs	Warm Springs Tribe
Lynn Hatcher	Yakima Tribe
Gary James	Umatilla Tribe
Ken Kauffman	Oregon Department of Health
Craig McCormick	Washington Department of Ecology
Bruce Mintz	U.S. EPA Headquarters, Office of Water
Cynthia Nolt	U.S. EPA Headquarters, Office of Water

Brian Offord	Washington Department of Ecology
Carol Schuler	U.S. Fish and Wildlife Service
Anne Watanabe	10Columbia River Inter-Tribal Fish Commission
Silas Whitman	Nez Perce Tribe
Don Yon	Oregon Department of Environmental Quality

1.3 STUDY OBJECTIVES

The primary objectives of the Phase II study are to:

- Measure fish contaminant levels for species and fishing locations being utilized by CRITFC member tribes to provide, in conjunction with the CRITFC (1994) fish consumption report, an assessment of fish consumption as an exposure route for waterborne toxics among individuals of these tribes.
- To use the information derived from the exposure assessment to estimate potential health risks to fish consumers in the four CRITFC member tribes.

The objectives for the Phase II study were thoroughly discussed at the Design Conference and consensus was reached for the two primary objectives listed above. Specific details regarding how the collected data will be used to accomplish these objectives will be developed as the Phase II study progresses. Design Conference attendees recommended that the methodology for conducting an assessment of human health for the CRITFC member tribes be clearly delineated, as well as the form in which this information would be conveyed to the public. In particular, questions were raised about whether the data would allow only site-specific exposure assessment, or whether the data could be extrapolated to estimate exposure over larger areas of the Columbia River Basin. It was decided that this issue could not be fully resolved until it was determined whether contaminant levels varied significantly among different collection sites.

The manner in which human health concerns resulting from the Phase II study would be disseminated to the public was also discussed at the Design Conference. Concerns were raised by conference attendees about the potential differences in methodology and presentation of human health information by State Health departments, EPA, and other state regulatory agencies. Design Conference attendees recognized that different agencies would likely utilize the available data to meet their own specific operational mandates, and that the analyses and form of presentation of the data might differ. However, it was generally agreed that all agencies should strive to keep each other informed about the uses and presentation of any data generated from the Phase II study.

Originally, a secondary objective of the Phase II study was to collect sediment contaminant data from the fish collection sites to aid in the determination of chemical-specific biota-sediment accumulation factors (BSAFs). While Design Conference attendees recognized the utility and merit of collecting this data, it was felt that available resources were insufficient to accomplish the primary objectives and carry out a statistically valid sampling program to determine BSAFs. Therefore, this secondary objective was eliminated in favor of a recommendation that additional resources be allocated, if possible, to determine BSAFs for the Columbia River Basin. Furthermore, there was general acknowledgment that implementation of this recommendation should be preceded by the development of a well planned, statistically valid, study design.

2.0 STUDY DESIGN

This section provides a description and rationale for the study design developed for U.S. EPA's Phase II Columbia River Inter-Tribal Fish Commission (CRITFC) exposure study. The study design was developed through a consensus process that considered the objectives presented in Section 1.3. The information used in developing this study design included the fish consumption data provided in the CRITFC (1994), existing data on chemical concentrations in fish tissue within the Columbia River Basin collected from 1984 - 1994, and the results of a human health risk-based screening analysis of the existing data. The main constraint on the study design was the resources available for dioxin and PCB congener analysis of tissue and sediment samples (\$250,000).

2.1 SELECTION OF SAMPLING LOCATIONS

Figure 1 illustrates the decision process that was used to select the sampling sites for both resident and anadromous fish species. Initially, fishing sites that represented greater than 40 percent of each tribe's fishing use for resident and anadromous fish species were identified. The 22 fishing locations for resident species that met this criterion were located in the Clearwater, Deschutes, and Umatilla watersheds, and the mainstem Columbia River below McNary Dam (Figure 2). For anadromous species, the same 22 locations plus 4 additional sites located in the mainstem Columbia River upstream from the mouth of the Snake River to Rocky Reach Dam represented greater than 40 percent of the fishing use (Figure 3). To reduce the number of sites

to a number consistent with the resources available for the Phase II sampling effort, the distribution of fishing sites exceeding the 40 percent use criterion was subdivided into two categories: watersheds with multiple fishing sites (i.e., Clearwater, Deschutes, and Umatilla), and mainstem Columbia River segments represented by a single fishing site (fishing sites 5-9, 15, 16, and 18). For the three watersheds with multiple fishing sites, a single site located near the base of the watershed (i.e., a second order river segment) was selected to be representative of other fishing sites within the watershed. The three sites that meet this criterion are fishing sites 98, 30, and

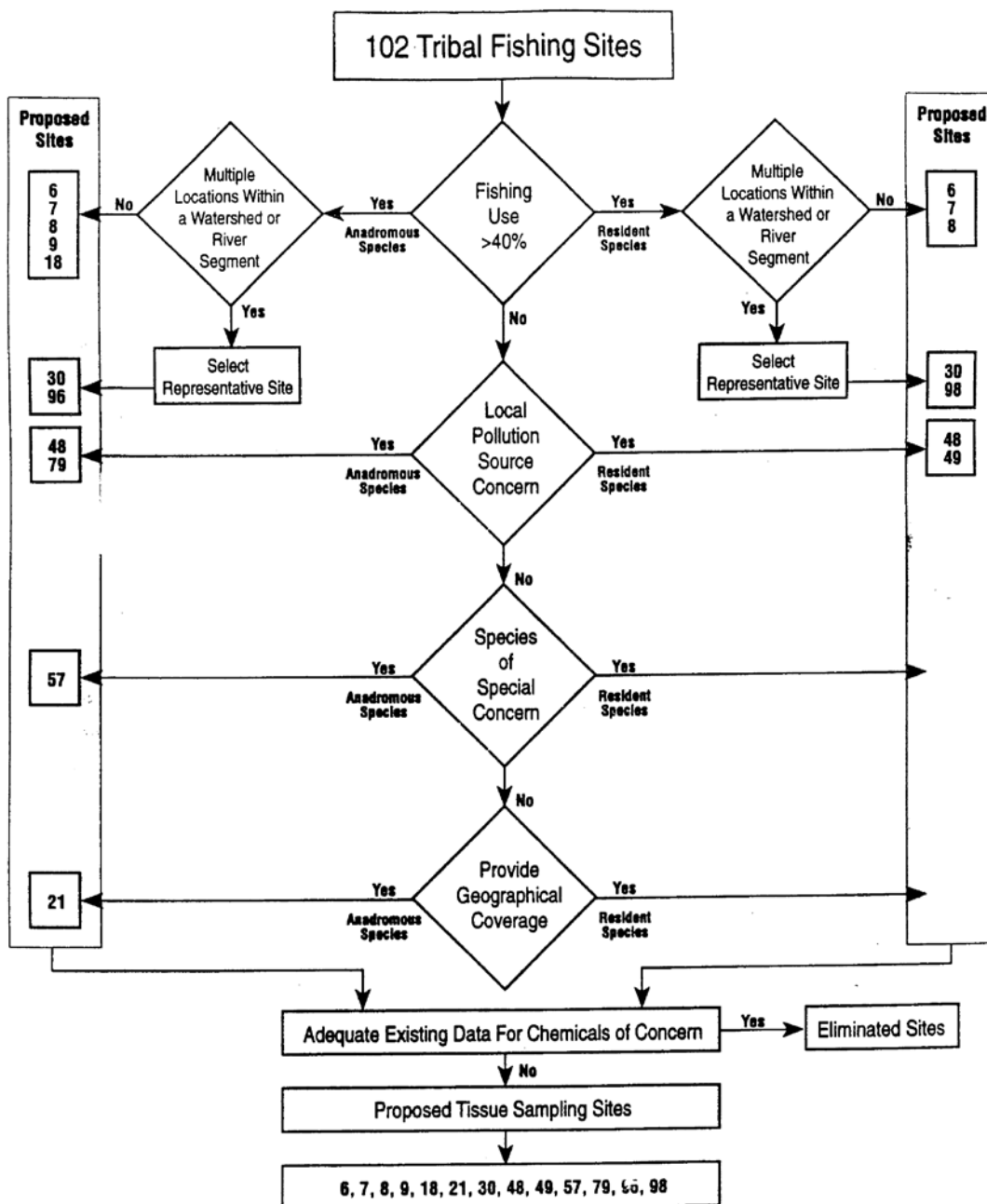
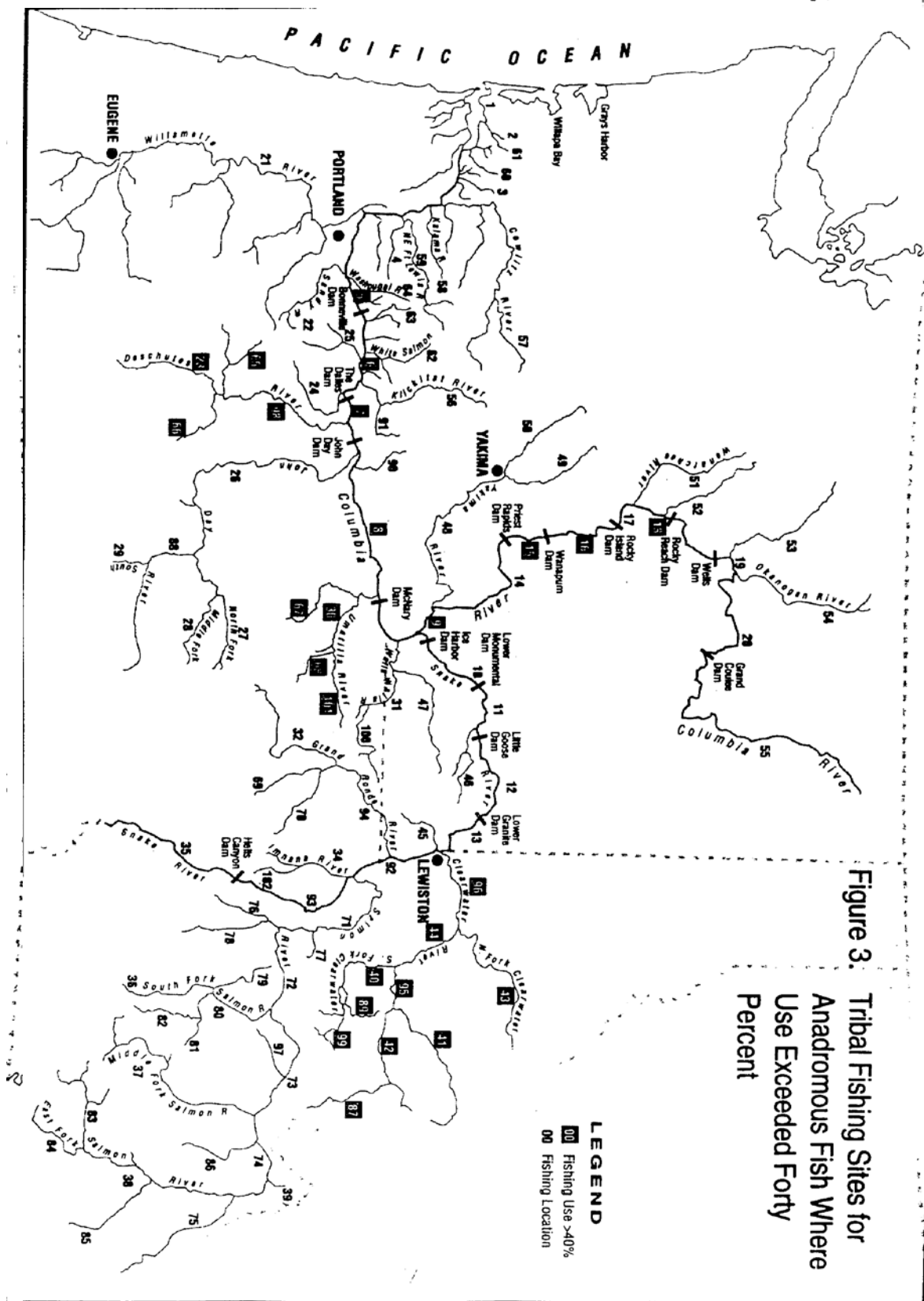


Figure 1. Decision Tree For Selection of Tissue Sampling Sites

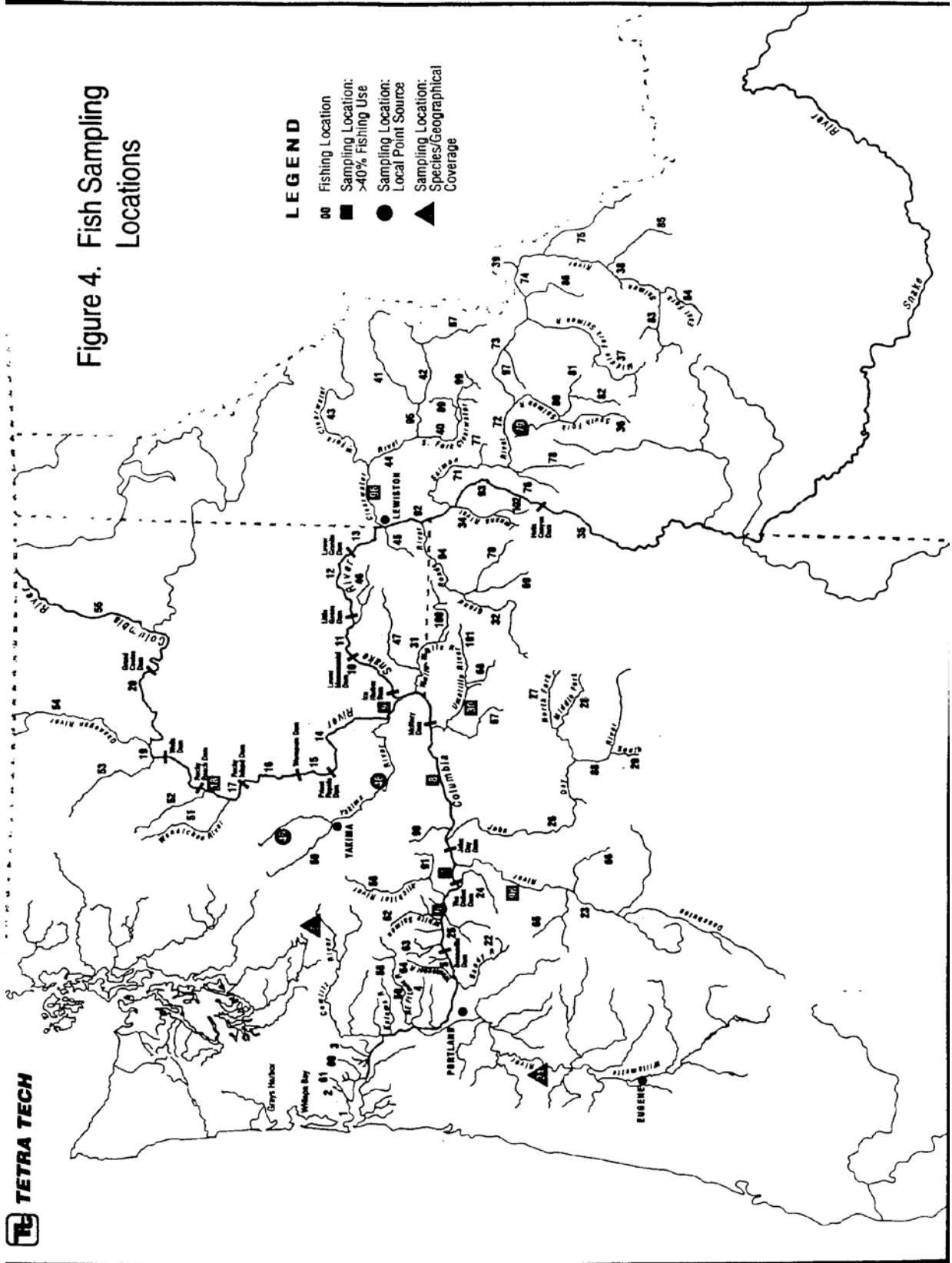


96 located in the Deschutes, Umatilla, and Clearwater Rivers, respectively (Figure 4). The assumption that these three sites will be representative of other fishing sites within each watershed is probably reasonable for anadromous species, but may not hold for resident species depending on local sources of contaminants and the ranges of the resident species being considered. The decision to analyze contaminant levels in resident species at the same sites as anadromous species was based on considerations of sampling logistics, and the desire to compare contaminant levels between both categories of fish.

Eight fishing sites in the mainstem of the Columbia River are located in river segments separated by dams. Sites 6, 7, and 8 were selected because they represented greater than 40 percent of the Yakima fishing use for both resident and anadromous species (Figure 4). Site 5, which also met these use criteria, was not selected because of the need to reduce the number of sampling locations, and because of the large amount of recent fish contaminant data that have been collected by Lower Columbia River Water Quality Bi-State Program in the vicinity of this site (Tetra Tech 1993; 1994a, b). Sites 9, 15, 16, and 18 are Columbia River mainstem sites that represent greater than 40 percent of the Yakima fishing use for anadromous species. Site 9 was selected by the Yakima representative due to its frequent use for fishing. Site 18 was selected because it represented the most upstream location with frequent fishing use. Fish collected at this site would presumably have the maximum exposure duration to contaminants within the mainstem Columbia River. Sites 15 and 16, which are located in the stretch of water between sites 9 and 18, were not selected because of the need to reduce the number of sites sampled.

Three sites (48, 49, and 79) were selected by tribal representatives because of concern about local pollution sources (Figure 4). Fishing use of these sites by tribal members is less than 20 percent. Sites 48 (Marion Drain) and 49 (Wilson Creek) are located in the Yakima River. There is concern that both of these sites have been adversely impacted from pesticide runoff (Hatcher, L., 28 September 1994, personal communication). Site 49 is also an important spawning site for rainbow trout. Site 79 is located in the Salmon River watershed in the vicinity of a mining operation.

Figure 4. Fish Sampling Locations



The two remaining sites that are proposed for sampling were selected by considering a particular species of concern and the desire to provide broad geographical coverage of sampling sites (Figure 4). Site 57, in the Cowlitz River, was selected to provide contaminant data for smelt. Fifty-two percent of adult tribal members consume smelt (CRITFC 1994). Because this fish species has a high oil content, it may accumulate higher levels of hydrophobic organic contaminants than other anadromous species; therefore, CRITFC Task Force members felt it was important to include sampling at site 57. Site 21, in the Willamette River, was selected to provide additional geographic coverage, and to provide contaminant data for lamprey, which are consumed by 54 percent of adult tribal members (CRITFC 1994).

2.2 SELECTION OF SPECIES

The selection of species to be analyzed was based primarily on consumption data presented in CRITFC (1994). Table 2 shows the fish species that are consumed by tribal members and the proposed fishing sites where the species will be collected. Tissue samples for all consumed species except squawfish and shad will be analyzed. These two species are consumed by only a small fraction (<2.7 percent) of adult tribal members.

2.3 SAMPLE TYPE

Figure 5 shows the locations, species, and sample types that will be analyzed during EPA's Phase II study. Four types of samples will be analyzed: whole-body (WB), fillet with skin (F_s), fillet without skin (F_w), and eggs (E). Whole-body samples were selected for several species to maximize the chances of measuring detectable levels of contaminants of concern and because data presented in CRITFC (1984) show that tribal members may consume several fish parts in addition to the fillet (Table 3). Eggs from spring chinook, fall chinook, and steelhead will be analyzed because consumption data shows that salmonid eggs are widely consumed by tribal members (Table 3). Because of the high lipid levels in eggs, concentrations of hydrophobic organic chemicals may reach substantially higher levels than in other fish tissues. Design

Conference attendees felt that it was important to determine contaminant levels in various fish

TABLE 2. PERCENTAGE OF ADULT TRIBAL MEMBERS CONSUMING PROPOSED TARGET SPECIES AND FISHING SITES WHERE THESE SPECIES WILL BE COLLECTED			
Species	Weighted Percent That Consume the Species	Proposed Fishing Sites	
		Site Numbers	Site Locations (Rivers)
Salmon	92.4%	21, 8, 9, 18, 30, 96	Willamette, Columbia, Umatilla, Clearwater
Lamprey	54.2%	21, 6	Willamette, Columbia
Trout ^a	70.2%	98, 8, 18, 30, 48, 49, 96, 79	Deschutes, Columbia, Umatilla, Yakima, Clearwater, Salmon
Smelt	52.1%	57	Cowlitz
Whitefish	22.8%	8, 30, 96	Columbia, Umatilla, Clearwater
Sturgeon	24.8%	6, 7, 8, 9, 96	Columbia, Clearwater
Walleye	9.3%	98, 8, 48	Deschutes, Columbia, Yakima
Sucker	7.7%	98	Deschutes
Squawfish	2.7%	none	none
Shad	2.6%	none	none
Source: Modified from CRITFC (1994).			
^a Rainbow Trout and Steelhead.			

Figure 5. Phase II Study Design

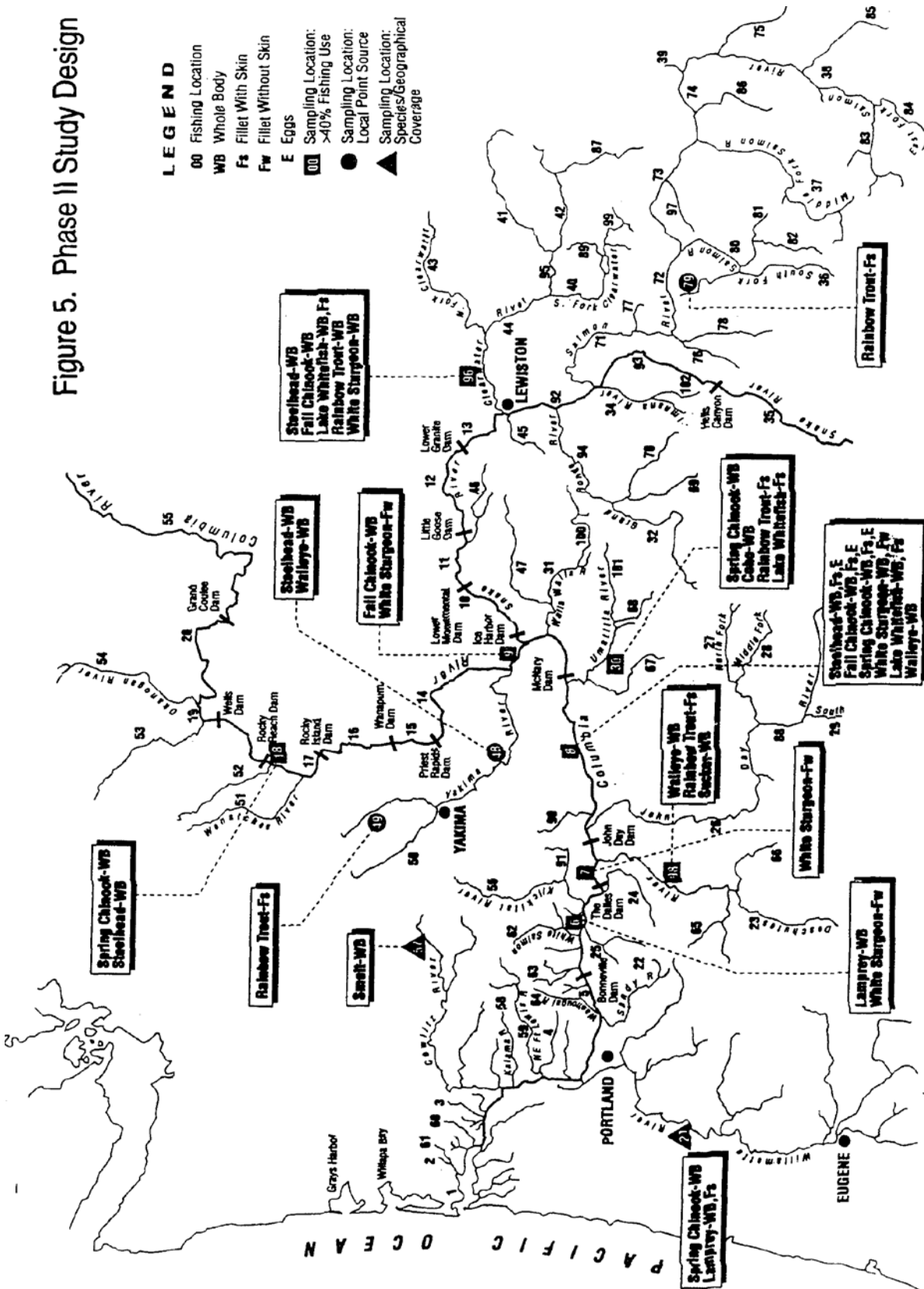


TABLE 3. COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION EXPOSURE STUDY. ADULT CONSUMPTION OF FISH PARTS

Species	Parts											
	Fillet		Skin		Head		Eggs		Bones		Organs	
	N	Weighted % That Consume	N	Weighted % That Consume	N	Weighted % That Consume	N	Weighted % That Consume	N	Weighted % That Consume	N	Weighted % That Consume
Salmon	473	95.1 %	473	55.8 %	473	42.7 %	473	42.8 %	473	12.1 %	470	3.7 %
Lamprey	249	86.4 %	251	89.3 %	250	18.1 %	250	4.6 %	250	5.2 %	250	3.2 %
Trout	365	89.4 %	365	68.5 %	365	13.7 %	364	8.7 %	365	7.1 %	362	2.3 %
Smelt	209	78.8 %	209	88.9 %	210	37.4 %	209	46.4 %	210	28.4 %	206	27.9 %
Whitefish	125	93.8 %	124	53.8 %	125	15.4 %	125	20.6 %	125	6.0 %	124	0.0 %
Sturgeon	121	94.6 %	121	18.2 %	121	6.2 %	121	11.9 %	121	2.6 %	121	0.3 %
Walleye	46	100 %	46	20.7 %	46	6.2 %	46	9.8 %	46	2.4 %	46	0.9 %
Sucker	15	89.7 %	15	34.1 %	15	8.1 %	15	11.1 %	15	5.9 %	15	0.0 %
Squawfish	42	89.3 %	42	50.0 %	42	19.4 %	42	30.4 %	42	9.8 %	42	2.1 %
Shad	16	93.5 %	16	15.7 %	16	0.0 %	16	0.0 %	16	3.3 %	15	0.0 %

Source: CRITFC (1994).

parts (i.e., whole-body, fillet, and eggs) so that this information could be used to provide guidance on how to prepare fish, or what parts should be avoided, in the event that contaminant levels exceed levels that warrant concern. In addition, the conversion factors developed from this data (e.g., whole-body: fillet and whole-body; egg ratios) may assist in the comparison of Phase II data with other historical data that exist within the Columbia River Basin. Figure 5 indicates that most of the comparisons of contaminant levels in different fish samples will occur at Site 8 in the Columbia River between the McNary and John Day dams. This site was selected because of its importance as a fishing site for all four CRITFC member tribes.

2.4 SAMPLING STRATEGY

The sampling strategy proposed for this study design is consistent with guidance provided in the document entitled: *Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories*, Volume I: Fish Sampling and analysis (U.S. EPA 1993b). For all fish species except white sturgeon, three replicate composite samples will be analyzed from each collection site. For white sturgeon, one sample from three individual fish will be analyzed from each collection site. The number of fish per composite will likely vary for different species: 20 individuals per composite for smelt and lamprey, 8 individuals per composite for resident species, and 5 individuals per composite for salmon and steelhead (Table 4). U.S. EPA (1993b) recommends that 3 to 10 individuals should be collected for a composite sample for each target species and that the same number of individual organisms should be used to prepare all replicate composite samples for a given target species at a given site. Several ongoing fish contaminant studies in the Columbia river Basin are compositing 8 individuals per sample, so the use of this number would simplify comparisons with other available data. Because of the small size of lamprey and smelt, a composite of 8 individuals would not provide enough tissue for all chemical analyses; therefore a nominal value of 20 individuals per composite was suggested for these species. Design

Conference attendees felt that the number of individuals per composite for salmon and steelhead should be reduced from 8 to 5 (some individuals suggested 3) because of concerns about the ability to collect sufficient numbers of fish, and because it was felt that the study should strive to minimize impacts on these fish stocks.

Collection periods for each species have been tentatively assigned and are given in Table 5. According to U.S. EPA guidance (U.S. EPA 1993b), the collection period should ideally avoid the spawning period of the target species, because many fish are subject to stress during spawning. However, because eggs will be collected from salmonid species, the typical spawning period for these species will be targeted (WDF/ODFW 1993). For resident species, wide collection periods have been proposed so that spawning periods can be avoided (Table 5). For white sturgeon, the proposed collection period is consistent with seasons established in previous years (WDF/ODFW 1994).

TABLE 4. STUDY DESIGN FOR ASSESSMENT OF CHEMICAL CONTAMINANTS IN FISH CONSUMED BY CRITFC MEMBER TRIBES

Species	Classification	Fishing Site ^a	Waterbody	Sample Type ^b	Number of Composite Samples	Number of Individual Samples	Number of Fish per Composite	Total Number of Fish
Smelt	Anadromous	57	Cowlitz River	WB	3	--	20	60
Lamprey	Anadromous	21 6	Willamette River Columbia River	WB, Fs WB	6 3	-- --	20 20	120 60
Steelhead	Anadromous	8 18 48 96	Columbia River Columbia River Yakima River Clearwater River	WB, Fs, E WB WB WB	9 3 3 3	-- -- -- --	5 5 5 5	30 ^c 15 15 15
Coho	Anadromous	30	Umatilla River	WB	3	--	5	15
Chinook (Fall)	Anadromous	8 9 96	Columbia River Columbia River Clearwater River	WB, Fs, E WB WB	9 3 3	-- -- --	5 5 5	30 ^c 15 15
Chinook (Spring)	Anadromous	21 8 18 30	Willamette River Columbia River Columbia River Umatilla River	WB WB, Fs, E WB WB	3 9 3 3	-- -- -- --	5 5 5 5	15 30 ^c 15 15
Rainbow Trout	Resident	98 49 96 30 79	Deschutes River Yakima River Clearwater River Umatilla River Salmon River	Fs Fs WB, Fs Fs Fs	3 3 6 3 3	-- -- -- -- --	8 8 8 8 8	24 24 48 24 24
White Sturgeon	Resident	6 7 8 9 96	Columbia River Columbia River Columbia River Columbia River Clearwater River	Fw Fw WB, Fw Fw WB	-- -- -- -- --	3 3 6 3 3	-- -- -- -- --	3 3 6 3 3
Lake Whitefish	Resident	8 30 96	Columbia River Umatilla River Clearwater River	WB, Fs Fs WB	6 3 3	-- -- --	8 8 8	48 24 24
Largescale Sucker	Resident	98	Deschutes River	WB	3	--	8	24
Walleye	Resident	98 48 8	Deschutes River Yakima River Columbia River	WB WB WB	3 3 3	-- -- --	8 8 8	24 24 24
TOTALS		13 sites	8 Rivers	4 Sample Types	105	18		819

^a Nominal collection areas.

^b WB = Whole body, Fs = Fillet with skin, Fw = Fillet without skin, E = Eggs.

^c Assumes eggs will be removed from whole-body samples and analyzed separately.

^a Nominal collection areas.

^b WB = Whole body, Fs = Fillet with skin, Fw = Fillet without skin, E = Eggs.

^c Assumes eggs will be removed from whole-body samples and analyzed separately.

TABLE 5. COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION EXPOSURE STUDY

Study Design for the Columbia River InterTribal Fish Commission Exposure Study								
Site	Receiving Water	Anadromous Fish Species (Sex)	Sample Type ^b	Collection Period ^a	Resident Fish Species (Sex)	Sample Type ^b	Collection Period	Number of Samples at Site ^c
48	Yakima River	Steelhead (F)	WB	Dec-June	Walleye	WB	Jan-Dec	6
18	Columbia River	Spring Chinook (F) Steelhead (F)	WB WB	Sept-Nov Dec-June	--	--	--	6
9	Columbia River	Fall Chinook (F)	WB	Sept-Oct	White Sturgeon	Fw	Jan-Mar	6
57	Cowlitz River	Smelt (F)	WB	Feb	--	--	--	3
6	Columbia River	Lamprey	WB	June-July	White Sturgeon	Fw	Jan-Mar	6
7	Columbia River	--	--	--	White Sturgeon	Fw	Jan-Mar	3
8	Columbia River	Spring Chinook (F) Fall Chinook (F) Steelhead (F)	WB, Fs, E WB, Fs, E WB, Fs, E	Sept-Nov Sept-Oct Dec-June	White Sturgeon Lake Whitefish Walleye	WB, Fw WB, Fs WB	Jan-Mar Jan-Dec Mar-June	42
49	Yakima River	--	--	--	Rainbow Trout	Fs	Mar-June	3
96	Clearwater River	Steelhead (F) Fall Chinook (F)	WB WB	Dec-June Sept-Oct	Lake Whitefish Rainbow Trout White Sturgeon	WB, Fs WB WB	Late July Mar-June Jan-Mar	18
79	Salmon River	--	--	--	Rainbow Trout	Fs	Mar-June	3
30	Umatilla River	Spring Chinook (F) Coho (F)	WB WB	Sept-Nov Oct-Dec	Rainbow Trout (F) Lake Whitefish (F)	Fs Fs	June-Dec Jan-Dec	12
98	Deschutes River	--	--	--	Rainbow Trout Largemouth Sucker Walleye	Fs WB WB	Mar-June Jan-Dec Mar-June	9
21	Willamette River	Spring Chinook (F) Lamprey	WB WB, Fs	Sept-Nov June-July	--	--	--	9
								Total + 12QA
								126 138

WB = Whole body, Fs = Fillet with skin, Fw = Fillet without skin, E = Eggs.
a Dates reflect typical spawning times. Source: Status Report. Columbia River Fish Runs and Fisheries 1938-1992 (WDF/ODFW 1993).
b Samples from all species except sturgeon are composites from 5-20 individuals. Sturgeon samples are from individual fish.
c Number of samples assumes each tissue sample performed in triplicate, each sediment sample performed in quadruplicate.

WB = Whole body, Fs = Fillet with skin, Fw = Fillet without skin, E = Eggs.

^a Dates reflect typical spawning times. Source: Status Report. Columbia River Fish Runs and Fisheries 1938-1992 (WDFW/ODFW 1993).^b Samples from all species except sturgeon are composites from 5-20 individuals. Sturgeon samples are from individual fish.^c Number of samples assumes each tissue sample performed in triplicate, each sediment sample performed in quadruplicate.

2.5 TARGET ANALYTES

Target analytes were selected by considering the guidance provided in U.S. EPA (1993b) and by performing a health risk-based screening analysis of tissue contaminant data collected within the Columbia River Basin during the last ten years (1984-1994). The exposure assumptions used to perform the screening analysis are given in Table 6. Screening for carcinogens was performed for a 70 kg adult using a target cancer risk of 1×10^{-6} . Screening for non-carcinogens was performed for a 14.5 kg child using a target hazard quotient of 0.1. Fish consumption rates assumed for adults and children were 194 and 81 g/day, respectively, which correspond to the cumulative 97th percentile consumption rate reported in CRITFC (1994). For chemicals that had both slope factors for estimating carcinogenic risk and reference doses for estimating non-carcinogenic risk, separate tissue screening concentrations (STCs) were calculated and the lower of the two values was used for the screening analysis. Chemical concentrations reported as not detected were assumed to be equal to one half the detection limit for the screening analysis.

Table 7 lists the chemicals that exceeded tissue screening concentrations (STCs) and the frequency of exceedances. Chemicals that exceeded STCs include dioxins/furans, PCBs, organochlorine and organophosphorus pesticides, PAHs and other semivolatiles, trace metals, and radionuclides. Table 8 provides a list of the chemicals that did not exceed STCs. It should be noted that the tissue screening analysis could only be conducted for chemicals that have established slope factors or reference doses; therefore, Table 8 includes chemicals that do not have either of these toxicological reference values.

The final list of chemicals that will be analyzed during the Phase II study will be presented in a sampling and QA/QC plan that will be prepared prior to initiating sampling. This document will also provide the analytical methods and quantitation levels expected for the laboratory analyses.

The chemical groups expected to be analyzed and a preliminary listing of the methods that may be employed are provided below:

TABLE 6. EXPOSURE ASSUMPTIONS FOR SCREENING FISH TISSUE CHEMICAL CONCENTRATIONS		
	Cancer	Non-Cancer
Target Cancer Risk	1×10^{-6}	
Target hazard quotient		0.1
Body weight - Adult (kg)	70	
Body weight - Child (kg)		14.5
Averaging time - Adult (years of life)	70	
Averaging time - Child (years of life)		10
Exposure frequency (days/year)	365	365
Fish ingestion rate - Adult (grams/day)	194 ^b	
Fish ingestion rate - Child (grams/day)		81 ^b
Oral carcinogenic slope factors and oral reference doses were obtained from IRIS or HEAST. ^a This value is the 97th percentile consumption rate for fish consumers cited in Phase I of this project. CRITFC (1994). Table 10. ^b This value is the 97.4th percentile consumption rate for fish consumers cited in Phase II of this project. CRITFC (1994). Table 24.		

TABLE 7. CHEMICALS THAT EXCEEDED TISSUE SCREENING CONCENTRATIONS
(Page 1 of 5)

Chemical Group	Chemical	Screening Tissue Concentration (STC) ($\mu\text{g}/\text{kg}$) ^a	STC Classification ^b	Total Measurements	Number Detected	Maximum Concentration ($\mu\text{g}/\text{kg}$) ^a	Total Number of STC Exceedances	Frequency of STC Exceedances
Dioxins/furans	1,2,3,4,6,7,8-HpCDD	0.000024	C	264	142	0.09172	264	100.0%
	1,2,3,4,6,7,1,2,3,4,7,8-HxCDF	0.000024	C	10	0	0.001385	10	100.0%
	1,2,3,4,7,8-HxCDD	0.000024	C	265	54	0.01885	265	100.0%
	1,2,3,6,7,8-HxCDD	0.000024	C	265	77	0.049	265	100.0%
	1,2,3,7,8,9-HxCDD	0.000024	C	265	38	0.00336	265	100.0%
	1,2,3,7,8-PeCDD	0.000005	C	229	61	0.009	229	100.0%
	2,3,4,6,7,8-HxCDF	0.000024	C	228	73	0.0115	228	100.0%
	2,3,7,8-TCDD	0.000002	C	548	323	0.05602	548	100.0%
	2,3,7,8-TCDF	0.000024	C	541	511	0.32069	541	100.0%
	2,3,4,7,8-PeCDF	0.000005	C	229	80	0.01902	228	99.6%
	1,2,3,7,8,9-HxCDF	0.000024	C	192	37	0.0045	188	97.9%
	1,2,3,7,8-PeCDF	0.000048	C	229	79	0.05432	221	96.5%
	1,2,3,6,7,8-HxCDF	0.000024	C	192	37	0.0056	182	94.8%
	1,2,3,4,7,8-HxCDF	0.000024	C	182	34	0.003	172	94.5%
	TOTAL HxCDD	0.000058	C	47	4	0.001	36	76.6%
	OCDD	0.0024	C	182	142	1	135	74.2%
	1,2,3,4,6,7,8-HpCDF	0.000024	C	192	50	0.0055	104	54.2%
	1,2,3,4,7,8,9-HpCDF	0.000024	C	228	25	0.002665	121	53.1%
	OCDF	0.0024	C	182	61	0.036	8	4.4%
	Aroclor 1016	0.047	C	109	0	25	109	100.0%
PCBs	Aroclor 1221	0.047	C	220	0	100	220	100.0%
	Aroclor 1232	0.047	C	220	1	40	220	100.0%
	Aroclor 1242	0.047	C	187	2	121	187	100.0%
	Aroclor 1242/1016	0.047	C	33	0	26	33	100.0%
	Aroclor 1248	0.047	C	143	1	100	143	100.0%
	Aroclor 1254	0.047	C	231	74	2700	231	100.0%
	Aroclor 1260	0.047	C	268	82	1403	268	100.0%
	TOTAL PCBs	0.047	C	328	132	2043.1	326	99.4%

TABLE 7. CHEMICALS THAT EXCEEDED TISSUE SCREENING CONCENTRATIONS
(Page 2 of 5)

Chemical Group	Chemical	Screening Tissue Concentration (STC) (µg/kg) ^a	STC Classification ^b	Total Measurements	Number Detected	Maximum Concentration (µg/kg) ^a	Total Number of STC Exceedances	Frequency of STC Exceedances
Pesticides Organochlorines	Aldrin	0.021	C	269	10	103	269	100.0%
	alpha-BHC	0.057	C	433	28	39	433	100.0%
	beta-BHC	0.20	C	412	14	150	412	100.0%
	Chlordane	0.28	C	184	3	70	184	100.0%
	Chlordane (tech)	0.28	C	23	18	144	23	100.0%
	Dicofol	0.82	C	186	17	300	186	100.0%
	Dieldrin	0.023	C	478	113	352	478	100.0%
	gamma-BHC	0.28	C	425	27	50	425	100.0%
	gamma-Chlordane	0.28	C	249	40	60	249	100.0%
	Heptachlor	0.080	C	287	22	68	287	100.0%
	Heptachlor epoxide	0.040	C	431	17	20	431	100.0%
	Lindane	0.28	C	5	0	5	5	100.0%
	o,p'-DDE	1.1	C	313	43	65	313	100.0%
	o,p'-DDT	1.1	C	313	42	105	313	100.0%
	Pentachlorophenol	3.0	C	129	0	6000	129	100.0%
	TOTAL BHC	0.28	C	29	3	160	29	100.0%
	Total Chlordane	0.28	C	29	18	200	29	100.0%
	TOTAL DDT	1.1	C	60	57	3000	60	100.0%
	Toxaphene	0.33	C	311	38	1200	311	100.0%
	Hexachlorobenzene	0.23	C	334	24	250	333	99.7%
	alpha-Chlordane	0.28	C	234	58	50	233	99.6%
	Endosulfan II	0.90	N	227	7	50	214	94.3%
	Endosulfan I	0.90	N	227	12	148	213	93.8%
	p,p'-DDE	1.1	C	498	391	3400	466	93.6%
	p,p'-DDT	1.1	C	473	215	960	424	89.6%
	o,p'-DDD	1.5	C	313	72	130	262	83.7%
	p,p'-DDD	1.5	C	430	214	420	330	76.7%
	Endosulfan	3.6	N	49	6	170	36	73.5%

TABLE 7. CHEMICALS THAT EXCEEDED TISSUE SCREENING CONCENTRATIONS (Page 3 of 5)								
Chemical Group	Chemical	Screening Tissue Concentration (STC) (µg/kg) ^a	STC Classification ^b	Total Measurements	Number Detected	Maximum Concentration (µg/kg) ^a	Total Number of STC Exceedances	Frequency of STC Exceedances
Pesticides (Cont.)	Mirex	3.6	N	262	5	50	180	68.7%
	Endrin	5.4	N	467	17	61	59	12.6%
	Methoxychlor	89.5	N	240	10	832	9	3.8%
Organophosphate	Methyl parathion	4.5	N	106	6	38	55	51.9%
	2,4,6-Trichlorophenol	32.8	C	129	0	1250	129	100.0%
Semi-Volatiles	2,4-Dichlorophenol	53.7	N	129	0	750	129	100.0%
	2,4-Dinitrophenol	35.8	N	128	0	2500	128	100.0%
	2,4-Dinitrotoluene	35.8	N	129	1	1250	129	100.0%
	2,6-Dinitrotoluene	0.53	C	129	0	1250	129	100.0%
	3,3'-Dichlorobenzidine	0.80	C	129	0	1250	129	100.0%
	Benzidine	0.0016	C	23	0	815	23	100.0%
	Bis(2-chloroethoxy)ether	0.33	C	258	0	250	258	100.0%
	Bis(2-chloroisopropoxy)ether	5.2	C	258	0	250	258	100.0%
	Bis(2-ethylhexyl)phthalate	25.8	C	129	51	34200	129	100.0%
	Hexachlorocyclopentadiene	125.3	N	127	0	1305	127	100.0%
	Hexachloroethane	17.9	C	129	0	250	129	100.0%
	N-Nitroso-di-n-propylamine	0.052	C	96	1	2900	96	100.0%
	N-Nitrosodimethylamine	0.0071	C	23	0	139	23	100.0%
	Nitrobenzene	9.0	N	129	0	250	129	100.0%
	Pyridine	17.9	N	23	0	139	23	100.0%
	Hexachlorobutadiene	4.6	C	146	0	250	128	87.7%
	Carbazole	18.0	C	73	0	250	56	76.7%
	4-Chloroaniline	71.6	N	54	0	750	35	64.8%
	2-Chlorophenol	89.5	N	129	1	4200	11	8.5%
	4-Nitrophenol	1109.9	N	129	2	4000	8	6.2%
	Trace Metals	1,2,4-Trichlorobenzene	179.0	N	147	6	3100	9
Isophorone		379.8	C	105	7	430	1	1.0%
2,4-Dimethylphenol		358.0	N	129	0	600	1	0.8%
Buryl benzyl phthalate		3580.2	N	129	1	3700	1	0.8%
Di-n-octylphthalate		358.0	N	129	1	2640	1	0.8%

TABLE 7. CHEMICALS THAT EXCEEDED TISSUE SCREENING CONCENTRATIONS
(Page 4 of 5)

Chemical Group	Chemical	Screening Tissue Concentration (STC) (µg/kg) ^a	STC Classification ^b	Total Measurements	Number Detected	Maximum Concentration (µg/kg) ^a	Total Number of STC Exceedances	Frequency of STC Exceedances
Semi-Volatile PAHs	Benz[a]anthracene	0.34	C	146	0	100	146	100.0%
	Benzo[a]pyrene	0.049	C	328	2	700	328	100.0%
	Benzo[b,k]fluoranthene	0.40	C	33	0	5	33	100.0%
	Benzo[b]fluoranthene	0.40	C	131	1	800	131	100.0%
	Benzo[k]fluoranthene	0.93	C	131	1	700	131	100.0%
	Chrysene	0.049	C	163	0	100	163	100.0%
	Dibenz[a,h]anthracene	0.045	C	146	0	200	146	100.0%
	Indeno[1,2,3-cd]pyrene	0.18	C	146	0	200	146	100.0%
	Benzo[g,h,i]perylene	2.3	C	162	0	200	142	87.7%
	Acenaphthene	1074.1	N	147	3	3800	1	0.7%
	Pyrene	537.0	N	163	3	5200	1	0.6%
	Arsenic	0.21	C	267	126	1860	267	100.0%
	Beryllium	0.084	C	40	2	60	40	100.0%
	Manganese	89.5	N	45	45	24200	45	100.0%
Trace Metals	Mercury	5.4	N	335	321	100000	334	99.7%
	Lead	7.7	N	298	220	23300	287	96.3%
	Cadmium	9.0	N	291	215	5910	250	85.9%
	Zinc	5370.4	N	297	296	136000	241	81.1%
	Selenium	89.5	N	207	91	2500	158	76.3%
	Antimony	7.2	N	170	20	2200	114	67.1%
	Nickel	358.0	N	136	57	17290	84	61.8%
	Barium	1253.1	N	144	117	47200	84	58.3%
	Copper	662.3	N	297	281	66900	173	58.2%
	Silver	89.5	N	136	39	1540	66	48.5%
	Chromium	89.5	N	102	69	620	44	43.1%

TABLE 7. CHEMICALS THAT EXCEEDED TISSUE SCREENING CONCENTRATIONS
(Page 5 of 5)

Chemical Group	Chemical	Screening Tissue Concentration (STC) ($\mu\text{g/kg}$) ^a	STC Classification ^b	Total Measurements	Number Detected	Maximum Concentration ($\mu\text{g/kg}$) ^a	Total Number of STC Exceedances	Frequency of STC Exceedances
Radionuclides	Americium 241	0.00084	C	33	0	0.0135	33	100.0%
	Cesium 137	0.0072	C	33	2	0.06	33	100.0%
	Europium 152	0.096	C	33	0	0.2	33	100.0%
	Europium 154	0.067	C	33	0	0.125	33	100.0%
	Plutonium 238	0.00092	C	33	1	0.011	33	100.0%
	Plutonium 239/240	0.00088	C	33	16	0.0055	31	93.9%
	Cobalt 60	0.013	C	33	0	0.075	16	48.5%
^a All concentrations are reported in units of $\mu\text{g/kg}$ wet weight, except for radionuclides. Radionuclide concentrations are reported as pCi/g wet weight.								
^b C = Carcinogen, N = Non-carcinogen.								

TABLE 8. CHEMICALS THAT DID NOT EXCEED TISSUE SCREENING CONCENTRATIONS									
Chemical Group	Chemical	Screening Tissue Concentration (STC) (ug/kg) ^a	STC Classification ^b	Total Measurements	Number Detected	Maximum Concentration (ug/kg) ^a	Total Number of STC Exceedances		
Pesticides	Dinitroanilines	Isopropalin	268.5	N	18	0	1.25	0	
		Trifluralin	134.3	N	18	1	7.16	0	
	Organochlorines	Dacthal	8950.6	N	81	9	50	0	
		Pentachloronitrobenzene	1.4	C	18	0	1.25	0	
	Organophosphates	Chlorpyrifos	53.7	N	18	1	3.44	0	
		Malathion	358.0	N	72	2	110	0	
		Parathion	107.4	N	72	3	26	0	
		Europrium 155	0.45	C	33	0	0.25	0	
	Radionuclides	1,2,4,5-Tetrachlorobenzene	5.4	N	18	2	1.61	0	
	Semi-Volatiles		1,2-Dichlorobenzene	1611.1	N	129	0	250	0
			1,3-Dichlorobenzene	1593.2	N	129	0	250	0
			2,4,5-Trichlorophenol	1790.1	N	56	0	1250	0
			2-Methylphenol	895.1	N	129	0	326	0
			4-Bromophenyl phenyl ether	1038.3	N	129	0	250	0
			Benzoic acid	71604.9	N	56	3	2500	0
		Benzyl Alcohol	17901.2	N	56	2	250	0	
		Di-n-butylphthalate	1790.1	N	129	10	1550	0	
		Diethyl phthalate	14321.0	N	129	0	250	0	
		Dimethyl phthalate	1790.1	N	129	0	326	0	
		Pentachlorobenzene	14.3	N	18	1	1.25	0	
		Phenol	10740.7	N	129	10	5000	0	
Semi-Volatile PAHs			2-Chloronaphthalene	1432.1	N	129	0	250	0
			Anthracene	5370.4	N	163	0	100	0
			Fluoranthene	716.0	N	163	10	100	0
		Fluorene	716.0	N	163	3	100	0	
		Naphthalene	716.0	N	164	26	500	0	
	Phenanthrene	519.1	N	163	12	100	0		

^a All concentrations are reported in units of ug/kg wet weight, except for radionuclides. Radionuclide concentrations are reported as pCi/g wet weight.

^a All concentrations are reported in units of ug/kg wet weight, except for radionuclides. Radionuclide concentrations are reported as pCi/g wet weight.

Analyte Group	Analytical Method
Dioxins/Furans	EPA 1613B
Coplanar PCBs	NFCRC C5.181
Pesticides/PCBs	EPA 8081
Semivolatile organics	EPA 8270
PAHs	EPA 8270 with selected ion monitoring (SIM)
Metals	EPA 6010A

A contract laboratory will be responsible for processing the collected fish samples and for analysis of dioxin/furans and coplanar PCBs. The U.S. EPA Manchester Laboratory in Port Orchard, Washington will be responsible for all other analyses.

The resources allocated for chemical analyses do not presently provide for the analysis of radionuclides in tissue. Design Conference attendees recommended that analysis of radionuclides be included in the Phase II study. EPA staff are currently trying to determine whether an EPA laboratory can perform these analyses; if so, they will be included in the study design. If an EPA laboratory cannot provide these analyses, radionuclides will not be analyzed. This issue is expected to be resolved prior to the preparation of the draft sampling and QA/QC plan.

3.0 RECOMMENDATIONS

Design Conference attendees provided several recommendations that address a variety of issues relevant to the Phase II study and broader objectives for assessing the impacts of toxic contaminants and habitat degradation on fish stocks, ecological health, and human health. These recommendations are listed below.

3.1 GENERAL COMMENTS

- Studies should be designed with the goal of providing information that will allow better protection of natural resources.
- Ecological impairment should be evaluated. An ecological risk design conference should be held to develop specific objectives and a study plan for assessing ecological impairment.
- Regulatory agencies should coordinate their risk assessment activities to ensure that the public receives a consistent message.
- The methodology for conducting an assessment of human health for the CRITFC member tribes should be clearly delineated, as well as the form in which this information will be conveyed to the public.

3.2 COMMENTS SPECIFIC TO THE PHASE II STUDY

- A sampling and QA/QC document should be prepared for the Phase II study that includes a schedule for the project collection activities, report due dates, and peer review.

- Radionuclides should be analyzed.
- Composite samples should consist of fish within a specified size range. It is recommended that the size range include the larger fish within a given population, since these fish may contain higher contaminant burdens.
- A detailed study plan should be developed for determining biota-sediment-accumulation factors (BSAFs) for the Columbia River Basin.
- The sampling and QA/QC plan for the Phase II study should include guidance on selecting alternative species, or locations, if sufficient numbers of the target species can not be collected.
- If resources are insufficient to collect all of the samples included in this study design, it is recommended that the following samples, in order listed, be eliminated: largescale sucker at site 98, fall chinook at site 96.
- Any observed external anomalies in the fish collected should be collected.
- The inclusion in the study design of pathological analyses and measurement of fish hormone levels of fish collected should be considered.

4.0 REFERENCES

CRITFC (Columbia River Inter-Tribal Fish Commission). 1994. A fish consumption survey of the Umatilla, Nez Perce, Yakima, and Warm Springs Tribes of the Columbia River Basin. CRITFC Technical Report No. 94-3. Portland, Oregon.

Hatcher, L. 28 September 1994. Personal communication (Telephone conversation with Dr. Steve Ellis, Tetra Tech, Inc., Redmond, Washington). Yakima Indian Nation, Fisheries Resource Management, Toppenish, Washington.

Tetra Tech, Inc., 1993. Reconnaissance survey of the lower Columbia River. Task 6: Reconnaissance report (3 volumes). Prepared for Columbia River bi-State Committee. Tetra Tech, Inc., Redmond, Washington. Volume I - 454 pp + appendices. Volume 2 - Appendix A, Data Validation Reports - 361 pp. Volume 3 - Data Tables, Appendices B, C, D, and E - 314 pp.

Tetra Tech, Inc., 1994a. Assessing human health risks from chemically contaminated fish in the lower Columbia River. Sampling and Quality Assurance/Quality Control Plan. Prepared for the Columbia River Bi-State Program. Tetra Tech, Inc., Redmond, Washington.

Tetra Tech, Inc., 1994b. Lower Columbia River backwater reconnaissance survey (3 volumes). Prepared for the Columbia River Bi-State Program. Tetra Tech, Inc., Redmond, Washington.

US Environmental Protection Agency, 1993a. Interim report on data and methods for assessment of 2,3,7,8-tetrachlorodibenzo-p-dioxin risks to aquatic life and associated wildlife. EPA/600/R-93/055. US environmental Protection Agency, Office of Research and Development, Washington, DC.

US Environmental Protection Agency, 1993b. Guidance for assessing chemical contaminant data for use in fish advisories. Volume I: Fish sampling and analysis. EPA 823-R-93-002. US Environmental Protection Agency, Office of Water, Washington, DC.

Washington Department of Fisheries/Oregon Department of Fish and Wildlife (WDF/ODFW), 1993. Status Report. Columbia River Fish Runs and Fisheries, 1938-1992. Washington Department of Fisheries, Olympia, Washington. Oregon Department of Fish and Wildlife, Portland, Oregon.

Washington Department of Fisheries/Oregon Department of Fish and Wildlife (WDF/ODFW), 1994. Joint staff report concerning commercial seasons for spring chinook, sturgeon, shad, and other fisheries and miscellaneous regulations for 1994. Joint Columbia River Management Staff. Washington Department of Fisheries, Olympia, Washington. Oregon Department of Fish and Wildlife, Portland, Oregon.

**COLUMBIA RIVER BASIN FISH
CONTAMINANT SURVEY**

**VOLUME I
Appendix B**

Fish Life Histories

January 2002

**Prepared by
U.S. Environmental Protection Agency
Region 10
Seattle, Washington**

Appendix B. Life Histories of Columbia River Basin Fish Species

The life histories of the twelve fish species collected to assess the chemical contamination of fish consumed by four Native American Tribes are provided as background information for the assessment. Of these fish, five (Pacific lamprey, eulachon, coho and chinook salmon, and steelhead trout) are anadromous, and three (channel catfish, smallmouth bass, and walleye) are not native to the Columbia River basin.

Pacific Lamprey (*Lampetra tridentata*)

The Pacific lamprey is a native anadromous fish. Adults from inland populations enter the Columbia River from the Pacific Ocean in late spring and early summer. Their distribution in the Columbia River basin is widespread, occurring in most streams with access to the ocean regardless of the distance from the ocean, as long as suitable spawning and rearing habitat are present (Kan 1975, Wydoski and Whitney 1979). The adults overwinter in freshwater, do not feed during this time, and spawn the following spring (Beamish 1980). Spawning is similar to salmonids, with both sexes constructing the nest (also called a redd) by moving sand and gravel in low gradient stream sections (Kan 1975).

The fecundity of lampreys in Oregon ranges from 98,000 to 238,400 eggs (Kan 1975). Fertilized eggs are adhesive, attach to sand grains, and are deposited in a redd and covered during the act of spawning (Pletcher 1963). The adults die soon after spawning. Depending on water temperature, eggs hatch in 2 to 4 weeks (Hart 1973). Larvae (ammocoetes) leave the gravel approximately 2 to 3 weeks after hatching, drift down current, settle in slow back water areas, burrow in soft substrates with organic debris, and take up a filter feeding existence (Pletcher 1963, Kan 1975).

The ammocoete life stage may range from 4 to 7 years, during which time they remain buried in the sediment (Beamish and Levings 1991, Close et al. 1995). Ammocoetes may move and disperse downstream at any time during the year. In the Nicola River (British Columbia) most movement occurred in May and June (Beamish and Levings 1991). Ammocoetes are reported to feed on vegetative material (Clemens and Wilby 1967), diatoms and desmids (Pletcher 1963), and detritus and algae suspended above and within the substrate (Moore and Mallatt 1980). Juvenile lampreys play an important role in the diets of many freshwater fishes, including channel catfish, northern pike minnow, and several species of cyprinids and cottids. Salmonid fry prey upon lamprey eggs, but do not feed on the ammocoetes. The larvae are also taken by several species of gulls and terns (Pletcher 1963, Close et al. 1995).

During metamorphosis to the adult stage, Pacific lamprey were observed to move from lentic areas with mud-silt substrates to areas of moderate water current with silt covered gravel, and eventually, during advanced stages of metamorphosis, to gravel-cobble substrates with moderate to strong currents. Metamorphosis occurs from July to October. Shortly thereafter, the downstream migration of young adult lampreys begins usually at night and with an abrupt increase in river flow. Pacific lampreys migrate to salt water where they take up a parasitic life, but feeding may start in freshwater (Pletcher 1963, Beamish 1980, Beamish and Levings 1991).

The adults parasitize salmonids and many other large, soft-scaled fish. However, whales may also be important hosts for the lamprey. Pacific lamprey scars were observed on 25 to 89% of the finback, sei, blue, humpback, and sperm whales (total of 237 whales) examined in 1950 off the coast of British Columbia (Pike 1951). Attachment to a host is aided by a round sucking mouth with marginal teeth. After attaching, the lamprey employs a strong rasping tongue to penetrate the epidermis of the host; then body fluids are extracted by means of a strong sucking action (McGinnis 1984). The ocean phase of the adult life cycle may last 3.5 years (Beamish 1980). In ocean and estuarine areas, adults are important prey for several pinniped species. After entering the Columbia River they become a prey item for white sturgeon (Wydoski and Whitney 1979, Roffe and Mate 1984, Close et al. 1995).

White Sturgeon - *Acipenser transmontanus*

White sturgeon is native to the Pacific Northwest where it has evolved life history characteristics that have allowed them to thrive for centuries in large, dynamic river systems containing diverse habitats with multiple food sources. These characteristics include opportunistic food habits, delayed maturation, longevity, high fecundity, and mobility (Beamesderfer and Farr 1997). White sturgeon may attain lengths and weights of more than 6 m and 580 kg, respectively, during a life span of over 100 years (Scott and Crossman 1973).

In the Columbia River basin, white sturgeon usually spawn in areas of high current velocity over large rocky substrates from April through July (Parsley et al. 1993, McCabe and Tracy 1994). A high discharge rate (flow) appears to stimulate spawning activity (Anders and Beckman 1995). Mean water column velocities near white sturgeon spawning sites in the Lower Columbia River were 0.8 to 2.8 m/sec, and velocities near the substrate were 0.5 to 2.4 m/sec. Most spawning occurs at 14°C (Parsley et al. 1993). Successful egg incubation is possible within a temperature range of 10 to 18°C, but best results occur at 14 to 16°C. Temperatures 18 to 20°C may cause substantial mortalities during sensitive embryonic stages, and temperatures above 20°C are clearly lethal to white sturgeon embryos (Wang et al. 1985,

1987).

During spawning, eggs and sperm are broadcast to the water column where fertilization occurs. A 43-kg female can contain 1.7 million eggs and large fish may produce up to 3 million eggs. The eggs are sticky and adhere to the bottom (Wydoski and Whitney 1979). Miller and Beckman (1996) believed that white sturgeon reduce the opportunity for predation from sympatric fishes by broadcasting their eggs in extremely fast-flowing water, which may limit predator access to the spawning and incubation areas. They found white sturgeon eggs in the guts of northern pikeminnow (*Ptychocheilus oregonensis*), largescale sucker (*Catostomus macrocheilus*), carp (*Cyprinus carpio*), and the prickly sculpin (*Cottus asper*).

Growth of young-of-the-year is rapid during the first summer and by September these fish may attain lengths of 17.6 cm and weights of 30 g (McCabe and Tracy 1994). Parsley et al. (1993) captured juvenile white sturgeon in the Lower Columbia River in areas with water depths of 2 to 58 m, mean water column velocities of 1.2 m/sec or less, and substrates of hard clay, mud and silt, sand, gravel, cobble, boulder, and bedrock. Young-of-the-year were found in similar areas. The habitats where these fish were captured indicates a tolerance of, but not necessarily a

preference for, a wide range of environmental conditions. In the Lower Columbia River, juvenile and young-of-the-year white sturgeon appeared to have a preference for the thalweg as that is where Parsley et al. (1993) most often captured them.

Shallow water areas, however, may represent important rearing habitat for white sturgeon. In the Lower Columbia River, McCabe et al. (1993) believed that juvenile white sturgeon 144 to 724 mm FL fed in water 1 to 6 m deep where a favorite prey item, a tube-dwelling amphipod, *Corophium salmonis*, reached densities more than 10 times greater than deeper water areas. In the Mid-Columbia River, Haynes and Gray (1981) observed diel movements by white sturgeon 98 to 236 cm TL into shallow water nearshore and slough areas in late afternoon and evening and a return to deep water the following morning. These movements were into areas where benthic organisms and smaller fish were more abundant.

White sturgeon also take advantage of scattered and seasonal food sources by moving between different riverine habitats. They feed on a wide range of food items including zooplankton, molluscs, amphipods, aquatic larvae, benthic invertebrates, and fish (McCabe et al. 1993). White sturgeon are more predaceous than any other North American sturgeon (Semakula and Larkin 1968) and can capture and consume large prey (Beamesderfer and Farr

1997). Seasonal migrations occur in the Lower Columbia River where sturgeon move to feed on eulachon (*Thaleichthys pacificus*), northern anchovy (*Engraulis mordax*), American shad (*Alosa sapidissima*), moribund salmonids, amphipods, and other invertebrates (DeVore et al. 1995).

Growth of white sturgeon appears to be favorable in some reservoirs. The growth rate of juvenile and adult white sturgeon below Bonneville Dam is about 6.6 cm/yr (range 2.1 to 14 cm/yr) for fish between ages 1 to 21 years. Males mature at 12 years and females at 16 to 35 years of age (Galbreath 1985, DeVore et al. 1995). Miller and Beckman (1993) report faster growth for juvenile white sturgeon in the Columbia River reservoirs as compared to the lower river. The growth rate of white sturgeon in the Hells Canyon free-flowing reach of the Snake River was generally quite rapid up to about 4 years of age (up to 60 cm TL), averaged about 2 cm/yr from ages 4 to 15 years (up to 85 cm TL), increased to about 8 cm/yr from ages 15 to 30 years (up to 210 cm TL), and then decreased to 2 cm/yr from ages 30 to 45 years (up to 240 cm TL) (Coon 1978). In the Lower Granite Reservoir, Lepla (1994) found growth rates for fish age 1 to 20 to exceed those observed by Coon (1978).

White sturgeon are capable of moving long distances over a short period of time. Galbreath (1985) reported apparently random movement for 1,141 previously tagged white sturgeon below Bonneville Dam from 1976 through 1983; the fastest fish traveled 37 km in 3 days. While studying 29 radio transmitter-tagged juvenile and adult white sturgeon, total lengths (TL) 83 to 218 cm, in the free-flowing reach of the Mid-Columbia River, Haynes et al. (1978) observed movement of 3 to 12 km/week upstream and more than 15 km/week downstream. The average distance traveled for fish that moved at least 0.8 km from the point of release was 40.2 km (25 miles). The movement of white sturgeon in the free-flowing Hells Canyon reach of the Snake River appears to be more restricted than Columbia River fish (Coon 1978).

White sturgeon in reservoir systems are also capable of moving considerable distances. After capture and release, sturgeon moved a maximum of 152 km (94 miles) but averaged 8.1 km (5 miles) in the three lowest reservoirs in the Lower Columbia River; the time of travel was not given (North et al. 1993). Fish size did not appear to affect the distance or direction traveled, and 49.9% moved upstream and 50.1% moved downstream. Four percent of the tagged sturgeon moved past a dam (26 fish moved downstream and 1 upstream).

From 1938 to 1969 at Bonneville Dam, 3% (141 fish) of the total upstream passage of white sturgeon used the fish ladders (Warren and Beckman 1993). Passage records from that time

period at Bonneville, The Dalles, and John Day dams indicate there was an upstream migration of white sturgeon that peaked in August. It is unknown if this migration continues today and at what level. Recent observations in the impounded part of the Lower Columbia River (North et al. 1993, Beamesderfer et al. 1995) indicate that white sturgeon rarely use fish passage facilities designed for the passage of salmonids. Avenues for passage more frequently used by this fish are the navigation locks, through the turbines, or perhaps over the spillway.

Brown et al. (1992) found that over-exploitation of the white sturgeon in the Columbia River during the late 1800s and early 1900s and the subsequent habitat destruction caused by the construction of hydroelectric dams caused a “genetic bottleneck” that reduced mtDNA or genetic diversity in Columbia River white sturgeon. Brown (ibid.) found a steep reduction in the mtDNA diversity in the landlocked sturgeon populations in the Columbia River. Of six observed genotypes in the river, the upriver population above McNary Dam shares only one genotype with fish found below Bonneville Dam.

Largescale Sucker - *Catostomus macrocheilus*

This species is native to the Pacific Northwest in tributaries to the Pacific Ocean from the Skeena River in British Columbia to the Sixes River in Oregon. Its range extends inland to western Montana and northern Utah (Brown 1971, Scott and Crossman 1973). Largescale suckers are abundant throughout the Columbia River and are the most common resident fish species collected in the Hanford Reach (Gray and Dauble 1977). This sucker may live in rivers, reservoirs, and lakes where adults are found at water depths ranging from less than 1 m to more than 15 m. They are often found in large numbers in shoreline areas with aquatic vegetation, in backwater areas, and in the mouths of streams (Clemens et al. 1939). Patten et al. (1970) usually found this species in warmer, flowing waters in the Yakima River.

In the Hanford Reach of the Columbia River, the peak of spawning by this species occurs from late May to June when water temperatures are 12 to 15°C (Dauble 1986). Spawning usually takes place in shallow riffle areas with water currents approximately 0.3 to 1.5 m/sec and over gravel-cobble substrates. A female may produce 20,000 eggs, which are adhesive and hatch in about 2 weeks. Fry remain in the substrate until the yolk sac is absorbed, after which they emerge and become pelagic until they are about 16 to 18 mm in length. They then become associated with the bottom for the duration of their lives (McCart and Aspinwall 1970, Brown 1971, Scott and Crossman 1973, Dauble 1986).

Growth of largescale suckers in the Columbia River is highest during the first four years of life and ranges from 37 to 73 mm/year until maturity, which occurs at about age 5 (Dauble 1986). Largescale suckers at age 5 range in length from 190 mm and 250 mm. The maximum known weight and length for this fish are 3.17 kg and 610 mm (McPhail and Lindsey 1970, Brown 1971, Scott and Crossman 1973). Maximum reported age for this species is about 15 years for a fish 540 mm in length (Clemens et al. 1939).

MacPhee (1960) studied the diets of fry and juvenile largescale suckers ranging in length from 12 to 38 mm and measured the following percent occurrences: diatoms - 29 to 90%, protozoans - 13 to 69%, rotifers - 69 to 82%, cladocerans - 60 to 73%, and midges - 18 to 32%. Dauble (1986) found that algal periphyton was the major food item for fry, juvenile, and adult largescale suckers in the Columbia River. The stomachs of adults may also contain crustaceans, aquatic insect larvae, snails, fish eggs, sand, and bottom debris (Dauble 1986, Scott and Crossman 1973). The diet of largescale suckers living in lakes differs from those fish living in streams. Stream fish appear to feed upon more algae, diatoms, and aquatic insect larvae other than Chironomidae, whereas lake fish include Amphipoda and Mollusca (Carl 1936).

In the lower Columbia River, this fish generally ascends tributaries only on spawning migrations (Reimers and Bond 1967), but Patten et al. (1970) did not observe this behavior in the Yakima River. Largescale suckers occasionally hybridize with white suckers (*C. commersoni*) where their ranges overlap in British Columbia (Nelson 1968) and with the bridgelip sucker (*C. columbianus*) in the Yakima river (Patten et al. 1970). Adults of this species occur where predation by larger fish is unlikely. However, fry and juveniles are likely prey for the northern pikeminnow, and the adults are taken by osprey, eagles, mergansers, and mammals (Scott and Crossman 1973).

Bridgelip sucker - *Catostomus columbianus*

The distribution and habitat of the bridgelip sucker is restricted to freshwater in the Pacific Northwest. It is generally found in the Fraser and Columbia river basins from British Columbia to southeastern Oregon, including the Harney basin, below Shoshone Falls in the Snake River, and in northern Nevada (Scott and Crossman 1973, Lee et al. 1980). Throughout its range in coexists and hybridizes with the largescale sucker (*C. macrocheilus*) (Dauble and Buschbom 1981).

The life history and behavior of the bridgelip sucker are poorly understood. According to Scott

and Crossman (1973), this fish usually inhabits small, swift, cold-water rivers with gravel to rocky substrates, whereas Wydoski and Whitney (1979) report it inhabits quiet backwater areas or the edges of the main current of rivers with sand or mud bottoms. In the Yakima River, Patten et al. (1970) found this fish in warm flowing waters. In the mid Columbia River during the day, Dauble (1980) found that subadult and adult bridgelip suckers were common in the tailouts of pools, at the end of riffles, and above boulders in the main current. At night, these fish were more abundant near shore in flowing water 0.6 to 1.5 m deep.

The spawning period for the bridgelip sucker extends from late April through June in the central Columbia River. Water temperatures during the peak of spawning range from 12 to 15°C. Eggs are probably broadcasted and fertilized in the water column as occurs with the other catostomids. In the Columbia River, sexual maturity is reached by most males at age 6 and lengths of 37 cm, for females it is at ages 5 to 7 and lengths from 33 to 42 cm. Fecundity ranges from about 10,000 to 21,000 eggs for females ranging in length from 37 to 46 cm (Dauble 1978).

The life history of the bridgelip sucker have not been well studied. Emergent 8 to 20 mm fry were observed inshore of the main Columbia River channel in mid-June. By late July and August, juveniles 16 to 52 mm in length were found in water 0.1 to 0.6 m deep usually over mixed mud and rock bottom (Dauble 1980). Wydoski and Whitney (1979) indicate that juveniles, at the end of their first summer, may reach 63 to 79 mm in length. Dauble (1980) estimated lengths at age 1 at 60 mm, age 2 - 171 mm, age 3 - 225 mm, age 4 - 294 mm, age 5 - 342 mm, age 6 - 356 mm, age 7 - 390 mm, and at age 8 - 405 mm. The maximum size Dauble (1978) measured was 489 mm at age 9.

The diet of *C. columbianus* is almost entirely periphyton during all seasons. This fish has an expanded cartilaginous lower lip on its mouth that enables it to efficiently crop algae attached to the bottom. However, like almost all other suckers, this species also feeds to some extent on aquatic insect larvae and crustaceans (Dauble 1978, Wydoski and Whitney 1979). Mammals and some birds prey on this species (Scott and Crossman 1973).

Channel catfish - *Ictalurus punctatus*

The native range of the channel catfish extends from southern Canada, including the Great Lakes, along the west side of the Appalachians to Florida, west to northeastern Mexico, and north up the Mississippi, Ohio, and Missouri rivers. It was introduced to Idaho waters in 1893

but the date of its introduction to Washington waters is unknown (Wydoski and Whitney 1979, Simpson and Wallace 1982).

This species can tolerate varying environmental conditions but prefer cool, clear, deeper water with sand, gravel, or rubble substrates. In its native environment the channel catfish inhabits moderate to swiftly flowing streams but can be abundant in sluggish streams, lakes, and reservoirs. Juvenile and yearling channel catfish inhabit faster currents than adults. Adults in rivers typically can be found under cover provided by log jams, rocks, or undercut banks. They move from cover into flowing water to feed (Miller 1966, Scott and Crossman 1973, Moyle 1976).

Depending on the region of the country, adults mature at age 3 to 4 and at lengths of 25 to 40 cm. Spawning occurs in the spring at water temperatures of 21 to 27°C. Males establish a nest in a protected, secluded site such as a hole, under logs, in a bank, or in rocky areas. Depending on the size of the female, egg production varies from 1,600 to 70,000 eggs. Eggs hatch in about 10 days at a water temperature of 28°C and the fish remain for 2 to 5 days on the bottom until the yolk sac is absorbed. The juvenile fish then swim to the surface to begin feeding (Scott and Crossman 1973, Wydoski and Whitney 1979, Simpson and Wallace 1982).

Young channel catfish tend to feed primarily on aquatic insects and bottom arthropods, but after attaining about 100 mm in length they are usually omnivorous or piscivorous (Carlander 1969). Adult channel catfish consume a wide variety of plant and animal material including clams, snails, crayfish, pondweed, and small terrestrial vertebrates (Eddy and Underhill 1976, Moyle 1976). Adults may feed heavily during the day or night and usually feed on the bottom (Miller 1966). In an Iowa stream, channel catfish less than 30 cm in length feed primarily on aquatic insects, while fish over 30 cm fed largely on small fish, large insects, and elm seeds (Bailey and Harrison 1948). In a large South Dakota reservoir, aquatic insects dominated the diet of all sizes of fish sampled, and the remainder of the diet was comprised of terrestrial insects, zooplankton, fish, and toads (Hill et al. 1995).

Growth is rapid in early years but can vary depending on the habitat. Young-of-the-year fish can achieve 102 mm in length by October, fish age 1 can attain lengths from 89 to 190 mm, at age 3 from 225 to 254 mm, and at age 6 from 264 to 556 mm. Channel catfish can live more than 25 years and attain lengths and weights of about 120 cm and 26 kg (Carlander 1969, Scott and Crossman 1973, Simpson and Wallace 1982).

Although channel catfish are believed to be largely sedentary, extensive local movements were

observed within the restricted range of this species in the Sacramento River, downstream movement in the fall was observed in the Colorado River, and homing movements of transplanted fish were observed in an Oklahoma lake. Fish tagged in the St. Lawrence River moved up and downstream and into tributaries, most moving distances of 16 to 62 km (McCammon 1956, Scott and Crossman 1973, Miller 1966). Young channel catfish are prey to a variety of fishes and piscivorous birds but the adults, due to their size and bottom occurrence, are probably free of predation (Scott and Crossman 1973, Schramm et al. 1984).

Eulachon - *Thaleichthys pacificus*

The eulachon occurs only on the west coast of North America from northern California, to the eastern Bering Sea, and the Pribilof Islands (Scott and Crossman 1973). This anadromous species spawns in the main channel of the Columbia River and in the Grays, Cowlitz, Kalama, Lewis, and Sandy rivers. However, adult eulachon may periodically fail to return and spawn in some of these tributaries. Prior to the construction of Bonneville Dam, these fish may have also occasionally spawned in Hood and Klickitat rivers (Smith and Saafeld 1955). The American Fisheries Society (Musick et al. 2000) believes this species is Threatened because its spawning and rearing habitats are vulnerable to siltation from silviculture and agriculture practices, dredging for navigation, and over harvesting of localized spawning runs.

A homing instinct has not been established where adults return to their natal streams. Depending on water temperature, adult eulachon are present in the lower Columbia River from January through April each year. Spawning occurs mainly during February and March; males are first to arrive on the spawning grounds followed shortly by the females. Eulachon spawn in their third and fourth year of life after which most adults die. Some fish survive to spawn a second time but these survivors spend little time in freshwater. The average length of a 3 and 4 year old fish is about 160 and 170 mm, respectively. Five years appears to be the maximum age for this fish (Smith and Saalfeld 1955, Barraclough 1964, Hart 1973, Wydoski and Whitney 1979).

Fecundity varies with the size of the female. It ranges from 20,000 to 60,000 eggs for females 140 to 194 mm in length, respectively. Eggs are scattered and fertilized in flowing water up to 25 ft deep, usually at night. The fertilized eggs drop to the bottom and attach to coarse sand grains or fine gravel. Eggs hatch as weak swimming 4 to 5 mm-long larvae in 30 to 40 days at water temperatures ranging from 4.4 to 7.2°C. The larvae are rapidly carried downstream by the current. It is believed that developing larvae do not feed in freshwater, but rely on their yolk sac for nourishment until they reach the ocean (Smith and Saalfeld 1955, Scott and Crossman 1973).

At sea, post-larval eulachon move into deeper water as they grow. They feed on plankton, mysids, ostracods, copepods and their eggs, and barnacle, cladoceran, and polychaete larvae (Hart 1973). Juvenile and adult fish feed primarily on euphausiid shrimp, crustaceans, and cumaceans. Adult eulachon live at moderate depths not far from shore where they have been captured by midwater trawls. Adults do not feed after they return to freshwater (Barracough 1964).

As are other smelts, *T. pacificus* is a very important food item for a wide variety of predators. Adults are feed on by many piscivorous fishes including Pacific salmon and white sturgeon, marine mammals ranging from the harbor seal to the finback whale, seabirds, waterfowls, and gulls (Scott and Crossman 1973). The larval and post larval stages contribute modestly to the diet of small salmon off the Fraser River (Hart 1973).

Mountain Whitefish - *Prosopium williamsoni*

The mountain whitefish is native to cold water rivers and lakes in western North America, both east and west of the Continental Divide (Scott and Crossman 1973, Sigler and Sigler 1987). It is usually found at elevations ranging from 1,370 to 2,225 m in Utah's Logan River (Sigler 1951), and above approximately 1,370 m in other parts of its range in Utah, Nevada, and California apparently due to high water temperatures at lower elevations (McAfee 1966).

Mountain whitefish may spawn from October to December (McAfee 1966, Sigler and Sigler 1987), and usually in riffle areas of streams where sediment particle size ranges from fine gravel to coarse rubble (Brown 1952). Spawning typically occurs nocturnally when a small number of fish move into tributary streams from a large river, or onto the margin of a lake. Fecundity ranges from 6,900 to 9,400 eggs per pound and these fish do not construct redds. The eggs are adhesive when released and stick to the bottom substrate (Sigler and Sigler 1987). Spawning occurs at water temperatures ranging from 0 to 9°C, but usually in the 3 to 5°C range (Northcote and Ennis 1994). The upper optimum water temperature for successful egg development is 6°C (Rajugopal 1979). Optimum temperatures for growth of whitefish fry ranges from 9 to 12°C (Stalnaker and Gresswell 1974, Rajugopal 1979).

Upon emergence, the mountain whitefish fry, having a weak swimming ability, drift passively downstream until suitable holding water is encountered. They inhabit shallow areas 5 to 20 cm deep from June to August (Pettit and Wallace 1975, Davies and Thompson 1976). Whitefish fry show positive photo taxis (Liebelt 1970) which probably accounts for their selection of

shallow backwaters and stream margins. After reaching about 5.5 cm in length, they inhabit low-velocity areas of a river margin having gravel, sand, or mud substrates. Yearlings also undergo seasonal migrations between feeding and overwintering habitats, but these probably do not exceed a few kilometers (Northcote and Ennis 1994).

Maximum growth rates for the mountain whitefish occur over the first two growing seasons (Pettit and Wallace 1975), and this fish usually becomes sexually mature from age 2 to 4 years (Brown 1952, Thompson and Davies 1976). The average age of this species is 7 or 8 years (Sigler and Sigler 1987), although it can live at least 18 years (McAfee 1966). Seven-year old fish range in length and weight from 307 to 387 mm and from 475 to 890 g, respectively, while the ranges for 8-year old fish are 330 to 410 mm and 501 to 944 g (Scott 1960, Pettit and Wallace 1975, Thompson and Davies 1976).

Mountain whitefish feed primarily on immature forms of bottom-dwelling aquatic insects such as Diptera (true flies and midges), Trichoptera (caddisflies), Ephemeroptera (mayflies), and Plecoptera (stoneflies) (Wydoski and Whitney 1979, Cirone et al. 2001). The general morphology of the mountain whitefish with its subterminal mouth suggests it is adapted to feeding on or near the bottom (Pontius and Parker 1973). Underwater observations of bottom feeding by DosSantos (1985) confirm that this fish actively forages by overturning rocks and plowing through substrates of small particle-sizes. Large mountain whitefish can be more generalized feeders and utilize a greater range of prey than smaller fish. For example, gastropods, small crayfish, leeches, dragonfly nymphs, the amphipod *Gammarus*, young fish, whitefish eggs, and eggs of other species are sometimes eaten by adults (McHugh 1940, Sigler 1951, McAfee 1966, DosSantos 1985). Small mountain whitefish are preyed upon by trout (Sigler and Sigler 1987), and likely by waterfowl and shorebirds.

Movement by adults appears to be complex and includes both nonmigratory and migratory behavior, and some fish exhibit a homing behavior when displaced (Erickson 1966, Liebelt 1970). Pettit and Wallace (1975) found that mountain whitefish movement usually slows and apparently ceases during the summer, but they did observe movements of greater than 80 km by some adults from late May to July in the watershed of the North Fork Clearwater River in Idaho.

Coho Salmon - *Oncorhynchus kisutch*

Coho salmon, one of the five Pacific salmon species in North America, are found from the Soviet Far East around the Bering Sea, to Alaska, and south along the coast to California (Hart

1973, Sandercock 1991).

The life span of most coho is three years, during which they attain average weights ranging from about 3 to 6 kg (Wydoski and Whitney 1979). These fish typically spend up to 21 months in freshwater followed by approximately 16 months in the ocean before returning to freshwater where they will spawn and die. Less frequently, coho spend 4 to 6 months at sea and return as “jacks” (precocious males), or they may spend two winters in freshwater and one winter in saltwater (Sandercock 1991).

Adult migration into the Columbia River begins in early September and may continue through December, and generally the early migrators move the furthest into headwater systems. The duration of a spawning migration into a particular stream is approximately three months (Wydoski and Whitney 1979, Sandercock 1991). As with other salmon species, fidelity to natal streams is high, which contributes to the maintenance of distinct populations. Coho usually start their migration after a large increase in streamflow with water temperatures ranging from about 7 to 15°C (Bell 1986). Other favorable stream characteristics for upstream migration are water velocities of up to 2.44 m/sec and a minimum water depth of 18 cm (Thompson 1972). During upstream migration, coho also need adequate cover and hiding areas. Deep pools, woody debris, and bank features, such as undercuts and overhanging vegetation and roots, provide resting and holding habitat for these fish (Bjornn and Reiser 1991).

Coho spawn in a wide variety of streams including very small tributaries, off-channel river areas, and headwater streams. Spawning areas are characterized by cool, clear, well-oxygenated water with stable flow. The average fecundity is about 3,500 eggs. Females build redds covering about 2.8 m² in areas with gravel ranging from 13 to 102 mm in diameter, water at least 18 cm deep, and water velocities from 30 to 91 cm/sec. Length of incubation is temperature dependent but generally lasts six to eight weeks. After hatching, larvae remain in the gravel for 2 to 3 weeks, and the fry emerge early March through July (Burner 1951, Thompson 1972, Sandercock 1991).

Shortly after emergence, juveniles must find and defend a territory. Once territories are established, coho will remain in the same locality for a relatively long period of time (Hoar 1958). Juveniles disperse if a territory is not established, usually in a downstream direction. Often, juveniles will school together as they search for unoccupied habitat. Coho will use shallow areas of pools and runs until they can compete for sites in deeper, faster water (Johnson et al. 1991). These fish rarely feed on non-moving food or off the bottom in streams (Sandercock

1991). Juveniles consume insects (larvae, pupae, and adults), worms, small fish, and fish eggs. In reservoirs, coho juveniles feed primarily on zooplankton and emerging insects (Wydoski and Whitney 1979).

With the onset of fall, juveniles will move to low gradient areas with deeper water and cover (Peterson 1982). Ideal overwintering habitat for coho juveniles includes sloughs, beaver ponds, and side channels with abundant cover in the form of woody debris or overhanging brush (Meehan and Bjornn 1991). During the winter, feeding virtually ceases and growth stops (Sandercock 1991).

In the Columbia River, outmigration occurs between March and July with the peak in May (Weitkamp et al. 1995). When juvenile coho first enter the sea they feed mostly on marine invertebrates, but as they grow they become more piscivorous. These fish may remain in coastal waters for several months before moving to the open ocean. At sea, the adult diet, consisting of 80% fish and 20% invertebrates, is more pelagic and varied than that of other Pacific salmon (Scott and Crossman 1973, Sandercock 1991).

Coho fry are susceptible to predation by piscivorous fish species, birds and ducks, and mammals such as mink and otters. In the ocean, adults are prey for lampreys, but aquatic mammals like pinnipeds and killer whales are their chief predators. During the spawning runs, adults are also taken by bears, other mammals, and large birds (Scott and Crossman 1973).

Chinook Salmon - *Oncorhynchus tshawytscha*

Chinook salmon are the largest of the Pacific salmon and have a variable life history. Timing of migration and spawning, and the duration of freshwater, estuarine, and ocean residencies varies for this species (Meehan and Bjornn 1991). 'Stream-type' and 'ocean-type' chinook are the two main races. Stream-type chinook are also referred to as spring or summer chinook salmon, and ocean-type as fall chinook salmon.

Stream-type chinook may spend a year or more rearing in freshwater before migrating to the sea, perform extensive offshore oceanic migrations, and return to their natal river in the spring or summer. Returning adults spend several months in freshwater before spawning. Ocean-type chinook migrate to the sea during their first year of life, spend most of their ocean life in

more coastal waters than stream-type fish, and return to their natal river in the fall a few days or weeks prior to spawning. Where these races are sympatric, stream-type chinook will typically migrate further upstream (Healey 1991). For example, ocean-type chinook spawn in the Columbia River mainstem areas and lower tributary streams while stream-type chinook spawn in the upper tributaries (Waknitz et al. 1995).

Chinook enter the Columbia River almost continuously from February through late November (Mullan 1987). Stream-type chinook enter the rivers mostly in spring and early summer, which allows them to take advantage of peak summer flows to reach headwater tributaries. Ocean-type chinook enter freshwater in the late summer and fall after peak summer flows (Healey 1991). Favorable stream characteristics for the upstream migration of adult chinook are water velocities up to 2 m/sec, water at least 0.24 m deep (Thompson 1972), and water temperatures ranging from about 9 to 14°C (Bell 1986). Upstream migrants also need adequate cover and hiding areas in the form of deep pools, woody debris, and bank features such as undercuts and overhanging vegetation (Bjornn and Reiser 1991).

Most (78%) of the chinook salmon in the Columbia River are ocean-type and they spawn from mid-September to late December. In general, stream-type chinook spawn earlier than ocean-type chinook (Healey 1991, Waknitz et al. 1995). Chinook will spawn in water velocities ranging from 0.1 to 2.1 m/sec. Chinook build redds in gravels ranging from 2.5 to 15 cm in diameter and the gravel patches selected tend to have homogenous particle size (Groves and Chandler 1999). Redds are located in water depths ranging from 0.2 to 6.5 m (Groves and Chandler 1999) and eggs are buried 10 to 33 cm deep in the gravel (Chapman et al. 1986). Redd area averages 16 m² for stream-type and 24 m² for ocean-type chinook. Fecundity ranges from about 2,000 to more than 17,000 eggs per female (Healey 1991).

Eggs incubate for several months before fry emerge in the spring. In the mid-Columbia River, fry generally emerge in April and May (Chapman et al. 1994). Within days or weeks, fry 30-45 mm in length are dispersed downstream. Ocean-type fish that emerge in the lower portion of the system may be dispersed directly to estuarine nursing areas, where they will rear for several months. Upstream populations of stream-type fry are redistributed downstream to available rearing areas in freshwater, where they will usually live for one year (Healey 1991).

Ocean-type juveniles migrate to the estuary at 3 to 6 months of age when they are 70 to 90 mm in length (Meehan and Bjornn 1991). In the estuary, these juveniles prefer low banks and subtidal refuge areas and their diet consists of insect and crab larvae and small fish (Healey 1991). Stream-type juveniles overwinter in freshwater before out migrating as yearlings from April to June. Some will spend two winters in freshwater. Deep pools with rock crevices provide over wintering habitat. In freshwater, juvenile diet is primarily insects, both aquatic larvae and terrestrial adults. During outmigration, yearling smolts spend a brief period in the estuary where they occupy the outer part of the estuary, thus, their habitat does not overlap with the smaller ocean type chinook (Healey 1991).

Chinook spend typically 3 to 4 years (range 2 to 8 years) feeding and growing in the ocean (Wydoski and Whitney 1979). The ocean diet is largely fish followed by invertebrates such as amphipods and crab larvae (Healey 1991). These fish usually return to freshwater at lengths ranging from 75 to 80 cm and weights that can exceed 50 kg, though most weigh less than 18 kg (Lee et al. 1979, Meehan and Bjornn 1991).

Juvenile chinook salmon are preyed upon by larger coho salmon smolts and a wide variety of piscivorous fish and bird species. Adults fall prey to lamprey and large mammals like pinnipeds in the ocean, and to bears on the spawning grounds (Scott and Crossman 1973).

Rainbow Trout and Steelhead- *Oncorhynchus mykiss*

Oncorhynchus mykiss are native to the Pacific Northwest and appear in two forms: the resident rainbow trout and the anadromous steelhead, both of which occur in the Columbia River basin. It also has the greatest diversity of life history patterns of any Pacific salmonid species (Wydoski and Whitney 1979, Pauley et al. 1986). This diversity includes degrees of anadromy, differences in reproductive biology, and plasticity of life history between generations (Peven 1990, Busby et al. 1996).

Rainbow trout require clear, cold water; a silt-free rocky substrate in riffle-run areas; an approximate 1:1 pool-to-riffle ratio that includes slow, deep water; an abundant in-stream and stable stream-bank cover; and relatively stable water flows and temperatures (Behnke 1992, Underwood and Bennett 1992). In lotic environments, adult rainbow trout typically inhabit water depths of 0.3 m or greater in areas with some type of cover and where slow (0 to 0.15 m/sec) water is adjacent to faster water that may carry food (Behnke 1992). Steelhead have many of these same habitat requirements (Narver 1976, Pauley et al. 1986, Barnhart 1986).

Rainbow trout, stimulated by rising water temperatures, spawn almost exclusively in streams, normally during the period from about February to June. Sexual maturity is reached at 2 to 3 years of age. Spawning usually occurs when daily maximum temperatures range from 10 to 15.5°C. Fecundity ranges from 200 to more than 12,000 eggs depending on the size and condition of the female. Eggs hatch within 4 to 7 weeks, depending on the water temperature. Fry emerge from the gravel about 2 weeks later (Scott and Crossman 1973, Wydoski and Whitney 1979, Simpson and Wallace 1982, Raleigh et al. 1984).

Summer steelhead enter the Columbia River between May and October as sexually immature fish and require several months to mature and spawn. During the early part of the maturation process, the summer steelhead may feed on insects and small fish (McGinnis 1984). In comparison, the winter run enters the river as sexually mature fish between November and April and may spawn shortly thereafter, and it rarely feeds if at all in freshwater. Klickitat River (WA) and Fifteen Mile Creek (OR) have the only populations of winter steelhead in the Columbia River above Bonneville Dam. All other inland steelhead are the summer run (Busby et al. 1996). Steelhead may spend from 1 to 4 years in fresh water and from 1 to 4 years in salt water. Summer steelhead spend 6 to 8 months less in salt water than a winter run fish of the same age (Withler 1966).

Fecundity of steelhead ranges from 2,000 to more than 10,000 eggs depending on the size and origin of the fish. Egg development time is the same as for the rainbow trout. Not all steelhead die after spawning (Buckley 1967, Pauley et al. 1986). During the first months after hatching, shallow water cover in the form of aquatic vegetation, debris piles, and interstices between rocks is critical for the survival rainbow and steelhead trout (Raleigh et al. 1984, Pauley et al. 1986). Later, juvenile fish occupy riffles in the summer, and pools during the other seasons. Seaward migration of steelhead usually occurs in the spring, but some fish leave their natal streams in the fall (Bjornn 1971, Wydoski and Whitney 1979).

The diet of rainbow trout and juvenile steelhead changes seasonally, depending on food availability. They may feed on aquatic insects, amphipods, leaches, snails, and fish eggs, and larger fish (>0.9 to 1.8 kg in weight) are often more piscivorous. The steelhead's diet in the ocean includes crustaceans, squid, herring, and other fish (Withler 1966, Wydoski and Whitney 1979, Sigler and Sigler 1987). Adult nonmigratory rainbow trout average 0.9 to 1.8 kg in weight and usually have a life span of 5 to 6 years (Simpson and Wallace 1982, Sigler and Sigler 1987). Steelhead can achieve 9 years of age, weights of 16 kg, and lengths to 122 cm (Scott and Crossman 1973, Wydoski and Whitney 1979). *O. mykiss* is preyed on by larger salmonids,

northern pikeminnow, and other piscivorous fish. Other predators include mink, great blue heron, diving birds like the common merganser, and the belted kingfisher (Scott and Crossman 1973, Riehle and Griffith 1993). Returning steelhead are preyed upon by pinnipeds (Roffe and Mate 1984).

Smallmouth Bass - *Micropterus dolomieu*

The native range of the smallmouth bass extended from northern Minnesota, east to Quebec, and south to Alabama and eastern Oklahoma, including the Great Lakes and adjacent

tributaries (Hubbs and Bailey 1938). This fish was introduced across North America and was planted in the Pacific Northwest in the late 1800s and early 1900s. In Washington, smallmouth bass are most numerous in the Columbia and Snake rivers (Wydoski and Whitney 1979, Simpson and Wallace 1982).

Smallmouth bass occur naturally in large, clear-water lakes and cool, clear streams having moderate current and a substrate of rock and gravel, but they can also live in ponds and turbid streams (Coble 1975). However, silt-laden streams offer poor habitat for this fish and population densities decline (Paragamian 1991). Smallmouth bass in a 17,400-hectare reservoir on the Tennessee River exhibited a strong association with steep drop offs in water deeper than 10 m. These fish resided in areas aligned with depth contours that were up to 405 m in length (Hubert and Lackey 1980). Smallmouth bass in streams and rivers have somewhat more restricted home ranges. They have demonstrated a fidelity for their home pools in small, stable streams in Indiana and Illinois (Gerking 1959), in small Ozark streams (Fajen 1962), and below the Hells Canyon reach in the Snake River (Munther 1970). Larimore (1952) noted the ability of this fish to return to their home pools after being displaced within 1 mile up or downstream. Henderson and Foster (1957) captured smallmouth bass downstream from their release site in the Yakima River, and from the Columbia River both up and down stream from the mouth of the Yakima. A fairly large percentage of these fish returned to their capture site, some returning over 40 miles.

The distribution of these fish tends to change during the day and by season. Early in the morning smallmouth bass tend to be located near the edge of the water current where feeding occurs. Nocturnally they can be found in still water on or under broken rock substrate or other cover (Munther 1970). Seasonal movement is most frequent during the spring when fish leave their home ranges to spawn. Seasonally flooding may also initiate movement (Todd and

Rabeni 1989). In the late fall and winter, the size of the home range becomes progressively smaller and is in deeper water than during the summer (Munther 1970). During the winter these fish become somewhat dormant and rarely feed. The non-activity period ends in March or early April when the water temperature increases to above 10°C (Hubbs and Bailey 1938, Coble 1975).

Smallmouth bass usually mature at 3 to 4 years of age and spawn during the spring when the water temperature increases to about 13 to 18°C (Wydoski and Whitney 1979, Serns 1984). Due to fluctuating water levels, however, successful spawning does not occur in the Hanford reach of the Columbia River until mid-July (Henderson and Foster 1957). Fecundity is positively correlated with age, varying from 2,000 to more than 17,000 eggs per female (Serns 1984). Redds are prepared by the male in gravel or rocky bottoms in locations sheltered from direct wind and wave action, usually in water 0.3 to 0.9 m deep. Fertilized eggs adhere to the rocks in the redd and are protected by the male during development. Fry leave the redd in schools and feed in shallow water (Hubbs and Bailey 1938, Coble 1975).

Smallmouth bass fry initially eat copepods and cladocerans and at lengths of 2 to 5 cm change to a diet of insects and small fish. Adults have been reported to feed on insects, crayfish, and fishes (Hubbs and Bailey 1938, Wydoski and Whitney 1979, Stephenson and Momot 1991). In

some cases, zooplankton (*Daphnia* and *Leptodora*) are important in the diets of adult fish (Dunsmoor et al. 1991). In a Tennessee River reservoir, crayfish made up 48% of the food volume of smallmouth bass 100 to 199 mm in length, but only 15% for fish over 300 mm long. The larger fish were primarily piscivorous (Hubert and Lackey 1980). Tabor et al. (1993) studied smallmouth bass predation in the upper end of McNary Reservoir, and reviewed the work of others in the Columbia River basin. In the study by Tabor et al. (1993), salmonids (mainly subyearling chinook salmon) made up 59% (by weight) of the food for smallmouth bass. In another study just upstream, salmonids were 30% (by volume), and in two downstream studies in the McNary and John Day reservoirs salmonids were 19% (by volume) and 4% (by weight), respectively. Tabor et al. (1993) concluded that predation rates on salmonids were high during the spring and early summer when subyearling salmon were abundant and of suitable forage size and shared habitat with the smallmouth bass.

Smallmouth bass in the Columbia River grow at a rate equal to or better than that of bass from other locations in the United States. In a 1952 study, the weights and total lengths of the

Columbia River fish at age four were 510 g and 32 cm; age six, 794 g and 38 cm; age eight, 1,304 g and 43 cm; and at age ten, 1,814 g and 47 cm, respectively (Henderson and Foster 1957, Wydoski and Whitney 1979).

Walleye - *Stizostedion vitreum*

The natural range of the walleye extends from the Northwest Territories east to Labrador in Canada, south to the Alabama and Tennessee river systems, and includes the upper Mississippi River and Great Lakes watersheds (Jordan and Evermann 1902, Scott and Crossman 1973). The walleye was introduced to the Columbia River below Roosevelt Dam probably in the 1940's or 50's (Wydoski and Whitney 1979). This species shows a preference for large, semi-turbid waters, but is capable of inhabiting a large range of physical and chemical conditions (Colby et al. 1979).

Although negatively phototropic, adult walleye occur in moderately shallow water. They usually are in contact with the substrate or under some form of cover (boulders, log and wood debris) during the daytime. Diurnal feeding movements from these areas occur during the morning and evening when low light levels occur (Eschmeyer 1950, Ryder 1977). In lakes and reservoirs, this fish is usually found above the thermocline and it avoids high current and turbulent areas (Colby et al. 1979).

Spawning occurs in lakes or streams in the spring or early summer depending on latitude and water temperature. Spawning can occur at water temperatures ranging from approximately 6 to 11°C (Scott and Crossman 1973). Spawning occurs at night, and the eggs are broadcast over boulder, rubble, gravel substrates in shallow littoral areas of lakes and to depths of about 2.5 m in rivers. Depending on the length of the fish, fecundity ranges from about 30,000 to more than 600,000 eggs per female. Eggs, which are loose upon the substrate, hatch in roughly 21 to 26 days at water temperatures of 4 to 10°C. Walleye fry are free swimming 10 to 15 days after hatching. They are believed to then move into pelagic areas until they reach lengths of 25 to 30 mm, when they return to shoreline areas (Eschmeyer 1950, Colby et al. 1979, Wydoski and Whitney 1979).

The walleye is a fast-growing and moderately long-lived fish, and growth is slower in the northern part of its range than in southern areas. In the northern part of its range, walleye mature between 2 to 6 years of age at lengths ranging from approximately 240 to 480 mm, respectively. Average life-expectancy varies from 12 to 15 years in the north to 5 to 7 years in the south part of its range. Maximum age is reported to be 20 years (Scott and Crossman

1973, Colby et al. 1979, Wydoski and Whitney 1979).

Feeding usually occurs near or at the bottom, and walleye may move into shallow water to feed. Walleye fry feed on rotifers, copepods, and cladocerans. Juvenile and adult walleye are largely piscivorous, but invertebrates (e.g., mayfly nymphs and amphipods) may be a large part of their diet in the late spring and early summer. Cannibalism is common with this species (Colby et al. 1979, Eschmeyer 1950). Prey for this species in the Columbia River includes mainly cottids, cyprinids, catostomids, and percopsids; out migrating juvenile salmonids were a smaller part of their diet (Zimmerman 1999).

Adult walleye are capable of movements of 60 km/month. In the spring large migrations move up streams and rivers to spawn in smaller tributaries and lakes (Eddy and Underhill 1976). Eschmeyer (1950) observed that fish disperse widely in lakes and rivers with movements of 5 km/day after spawning, and that relocated fish moved through a series of dams on the Muskegon River (Michigan) to return to Lake Michigan. Adult walleye are not usually preyed upon by other fish. However, in its native range northern pike and muskellunge do prey on this fish (Colby et al. 1979). They are also probably preyed upon by fish eating birds and mammals (Sigler and Sigler 1987).

Appendix B. References

- Anders, P.J., and L.G. Beckman. 1995. White sturgeon spawning cues in an impounded reach of the Columbia River, p. 123-140. In R.C. Beamesderfer & A.A. Nigro (editors) Status and habitat requirements of the white sturgeon populations in the Columbia River downstream of McNary Dam. Final Rep. Res. Vol. II - Supplemental papers and data documentation, July 1986 - September 1992. Proj. No. 86-50, Contract No. DE-AI79-86BP63584. Bonneville Power Admin., Portland, OR.
- Bailey, R.M., and H.M. Harrison, Jr. 1948. Food habits of the southern channel catfish (*Ictalurus lacustris punctatus*) in the Des Moines River, Iowa. Trans. Amer. Fish. Soc. 75:110-138.
- Barnhart, R.A. 1986. Species profiles: life histories and environmental requirements of coastal fishes and invertebrates (Pacific Southwest) – steelhead trout. U.S. Fish Wildl. Serv. Biol. Rep. 82(11.62). U.S. Army Corps of Engineers, TR EL-82-4. 21 p.
- Barraclough, W.E. 1964. Contributions to the marine life history of the eulachon, *Thaleichthys pacificus*. J. Fish. Res. Board Can. 21(5):1333-1337.
- Beamesderfer, R.C.P., T.A. Rien, and A.A. Nigro. 1995. Differences in the dynamics and potential production of impounded and unimpounded white sturgeon populations in the Lower Columbia River. Trans. Am. Fish. Soc. 124(6):857-872.
- Beamesderfer, R.C.P., and R.A. Farr. 1997. Alternatives for the protection and restoration of sturgeons and their habitat. Environ. Biol. Fish. 48:407-417.
- Beamish, R.J. 1980. Adult biology of the river lamprey (*Lampetra ayesi*) and the Pacific lamprey (*Lampetra tridentata*) from the Pacific coast of Canada. Can. J. Fish. Aquat. Sci. 37:1906-1923.
- Beamish, R.J., and C.D. Levings. 1991. Abundance and freshwater migrations of the anadromous parasitic lamprey, *Lampetra tridentata*, in a tributary of the Fraser River, British Columbia. Can. J. Fish. Aquat. Sci. 48(7):1250-1263.
- Behnke, R.J. 1992. Native trout of Western North America. Amer. Fish. Soc. Monograph 6. 275 p.

- Bell, M.C. 1986. Fisheries handbook of engineering requirements and biological criteria. Fish Passage. Develop. Eval. Prog., U.S. Army Corps Engineers, Portland, OR. 290 p.
- Bjornn, T.C. 1971. Trout and salmon movement in two Idaho streams as related to temperature, food, streamflow, cover, and population density. Trans. Amer. Fish. Soc. 100:423-438.
- Bjornn, T.C., and D.W. Reiser. 1991. Habitat requirements of salmonids in streams, p. 83-138. In W.R. Meehan (editor) Influences of forest and rangeland management on salmonid fishes and their habitats. Amer. Fish. Soc. Spec. Pub. 19.
- Brown, C.J.D. 1952. Spawning habits and early development of the mountain whitefish, *Prosopium williamsoni*, in Montana. Copeia 1952(2):109-113.
- Brown, C.J.D. 1971. Fishes of Montana. Big Sky Books, Montana State Univ., Bozeman, MT. 207 p.
- Brown, J.R., A.T. Beckenbach, and M.J. Smith. 1992. Influence of Pleistocene glaciations and human intervention upon mitochondrial DNA diversity in white sturgeon (*Acipenser transmontanus*) populations. Can. J. Fish. Aquat. Sci. 49:358-367.
- Buckley, R.V. 1967. Fecundity of steelhead trout, *Salmo gairdneri*, from the Alsea River, Oregon. J. Fish. Res. Board Can. 24(5):917-926.
- Burner, C.J. 1951. Characteristics of spawning nests of Columbia River salmon. U.S. Fish Wildl. Serv., Fish. Bull. 5:97-110.
- Busby, P.J., T.C. Wainwright, G.J. Bryant, L.J. Lierheimer, R.S. Waples, F.W. Waknitz, and I.V. Lagomarsino. 1996. Status review of West Coast steelhead from Washington, Idaho, Oregon, and California. U.S. Dept. Com., NOAA Tech. Mem. NMFS-NWFSC-27. 195 p. + 6 appendices.
- Carl, G.C. 1936. Food of the coarse-scaled sucker (*Catostomus macrocheilus* Girard). J. Biol. Board Can. 3(1):20-25.

- Carlander, K.D. 1969. Handbook of freshwater fishery biology. Vol. 1, Iowa State Univ. Press, Ames. 752 p.
- Chapman, D., A. Giorgi, T. Hillman, D. Deppert, M. Erho, S. Hays, C. Peven, B. Suzumoto, and R. Klinge. 1994. Status of summer/fall chinook salmon in the mid-Columbia region. Rep. Chelan, Douglas, and Grant County PUDs, Don Chapman Consultants, Inc. Boise, ID. 412 p. + appendices
- Chapman, D.W., D.E. Weitkamp, T.L. Welsh, M.B. Dell, and T.H. Schadt. 1986. Effects of river flow on the distribution of chinook salmon redds. Trans. Amer. Fish. Soc. 115:537-547.
- Cirone, P.A., D.W. Karna, J.R. Yearsley, C.M. Falter, and T.V. Royer. 2001. Ecological risk assessment for the middle Snake River, Volume 1. U.S. EPA, Region 10, Seattle, WA. 122 p. + 2 appendices.
- Clemens, W.A., D.S. Rawson, and J.L. McHugh. 1939. A biological survey of Okanagan Lake, British Columbia. Fish. Res. Board Can. Bull. No. 56. 70 p.
- Clemens, W.A., and G.V. Wilby. 1967. Fishes of the Pacific coast of Canada. Fish. Res. Board of Can. Bull. No. 68. 443 p.
- Close, D.A., M. Fitzpatrick, H. Li, B. Parker, D. Hatch, and G. James. 1995. Status of the Pacific lamprey (*Lampetra tridentata*) in the Columbia River basin. U.S. Dept. Energy, Bonneville Power Admin., Proj. 94-026, Contract No. 95BI39067, Portland, OR. 35 p.
- Coble, D.W. 1975. Smallmouth bass, p. 21-33. In H. Clepper (editor) Black bass biology and management. Sport Fish. Inst., Nat. Symp. Biol. Manage. Centrarchid Bases, Tulsa, OK.
- Colby, P.J., R.E. McNicol, and R.A. Ryder. 1979. Synopsis of biological data on the walleye *Stizostedion v. vitreum* (Mitchell 1818). FAO United Nations, Fish. Synopsis No. 119, Ontario Min. Natur. Resources, Fish. Res. Sect., Contrib. No. 77-13. 123 p. + 2 appendices.

- Coon, J.C. 1978. Movement, distribution, abundance and growth of white sturgeon in the Mid-Snake River. Ph.D. Thesis, Univ. Idaho, Moscow, ID. 73 p.
- Dauble, D.D. 1978. Comparative ecology of two sympatric catostomids, Catostomus macrocheilus, and Catostomus columbianus, in the middle Columbia River. M.S. Thesis, Washington State Univ., Pullman, WA. 95 p. + appendix.
- Dauble, D.D. 1980. Life history of the bridgelip sucker in the central Columbia River. Trans. Amer. Fish. Soc. 109:92-98.
- Dauble, D.D. 1986. Life history and ecology of the largescale sucker (*Catostomus macrocheilus*) in the Columbia River. Amer. Midland Natur. 116(2):356-367.
- Dauble, D.D., and R.L. Buschbom. 1981. Estimates of hybridization between two species of catostomids in the Columbia River. Copeia (4):802-810.
- Davies, R.W., and G.W. Thompson. 1976. Movements of mountain whitefish (*Prosopium williamsoni*) in the Sheep River Watershed, Alberta. J. Fish. Board Can. 33:2395-2401.
- DeVore, J.D., B.W. James, C.A. Tracy, and D.A. Hale. 1995. Dynamics and potential production of white sturgeon in the unimpounded Lower Columbia River. Trans. Am. Fish. Soc. 124(6): 845-856.
- DosSantos, J.M. 1985. Comparative food habits and habitat selection of mountain whitefish and rainbow trout in the Kootenai River, Montana. M.S. Thesis, Montana State Univ., Bozeman, MT. 65 p. + appendix.
- Dunsmoor, L.K., D.H. Bennett, and J.A. Chandler. 1991. Prey selection and growth of a planktivorous population of smallmouth bass in an Idaho reservoir, p. 14-23. In D.C. Jackson (editor) The first international smallmouth bass symposium, Mississippi Agr. Forest. Exp. Sta., Mississippi State Univ.
- Eddy, S., and J.C. Underhill. 1976. Northern fishes. Third Ed., Univ. Minnesota Press, Minneapolis, MN. 414 p.
- Erickson, J. 1966. Summarization of life history and management studies on the Rocky

- Mountain whitefish in the Snake River drainage, 1952-1964. Wyoming Game Fish Comm., Fish Div., Admin. Rep., Proj. 0166-23-5501. 28 p.
- Eschmeyer, P.H. 1950. The life history of the walleye in Michigan. Michigan Dep. Conserv., Inst. Fish. Res., Bull. 3. 99 p.
- Fajen, O.F. 1962. The influence of stream stability on homing behavior to two smallmouth bass populations. Trans. Amer. Fish. Soc. 91:346-349.
- Galbreath, J.L. 1985. Status, life history, and management of Columbia River white sturgeon, *Acipenser transmontanus*, p. 119-125. In F.P. Binkowski and S.I. Doroshov (editors) North American sturgeons: biology and aquaculture potential. Dr. W. Junk Publishers, Dordrecht, Netherlands.
- Gerking, S.D. 1959. The restricted movement of fish populations. Biol. Rev. 34:221-242.
- Gray, R.H., and D.D. Double. 1977. Checklist and relative abundance of fish species from the Hanford Reach of the Columbia River. NW Sci. 51:208-215.
- Groves, P.A., and J.A. Chandler. 1999. Spawning habitat used by fall chinook salmon in the Snake River. N. Amer. J. Fish. Manage. 19:912-922.
- Hart, J.L. 1973. Pacific fishes of Canada. Bull. Fish. Res. Board Can. No. 180. 740 p.
- Haynes, J.M., and R.H. Gray. 1981. Diel and seasonal movements of white sturgeon, *Acipenser transmontanus*, in the mid-Columbia River. U.S. Fish. Bull. 79(2):367-370.
- Haynes, J.M., R.H. Gray, and J.C. Montgomery. 1978. Seasonal movements of white sturgeon (*Acipenser transmontanus*) in the Mid-Columbia River. Trans. Am. Fish. Soc. 107(2):275-280.
- Healey, M. C. 1991. Life history of chinook salmon (*Oncorhynchus tshawytscha*), p. 311-393. In C. Groot and L. Margolis (editors) Pacific salmon life histories, Univ. British Columbia Press, Vancouver, BC.

- Henderson, C., and R.F. Foster. 1957. Studies of smallmouth black bass (*Micropterus dolomieu*) in the Columbia River near Richland, Washington. Trans. Amer. Fish. Soc. 86:112-127.
- Hill, T.D., W.G. Duffy, and M.R. Thompson. 1995. Food habits of channel catfish in Lake Oahu, South Dakota. J. Freshwater Ecol. 10(4):319-323.
- Hoar, W.S. 1958. The evolution of migratory behaviour among juvenile salmon of the genus *Oncorhynchus*. J. Fish. Res. Board Can. 15:391-428.
- Hubbs, C.L., and R.M. Bailey. 1938. The small-mouthed bass. Cranbrook Inst. Sci. Bull. No. 10. 89 p.
- Hubert, W.A., and R.T. Lackey. 1980. Habitat of adult smallmouth bass in the Tennessee River Reservoir. Trans. Amer. Fish. Soc. 109:364-370.
- Johnson, O.W., T.A. Flagg, D.J. Maynard, G.B. Milner, and F.W. Waknitz. 1991. Status review for lower Columbia River coho salmon. U. S. Dep. Com., NOAA Tech. Mem. NMFS F/NWC-202. 81 p.
- Jordan, D.S., and B.W. Evermann. 1902. American food and game fishes. Doubleday, Page & Co., NY. 572 p.
- Kan, T.T. 1975. Systematics, variation, distribution, and biology of lampreys of the genus Lampetra in Oregon. Ph.D. Thesis, Oregon State Univ., Corvallis, OR. 194 p.
- Larimore, R.W. 1952. Home pools and homing behavior of smallmouth black bass in Jordan Creek. Illinois Nat. Hist. Surv. Biol. Notes No. 28. 12 p.
- Lee, D. S., C. R. Gilbert, C. H. Hocutt, R. E. Jenkins, D. E. McAllister, and J. R. Stauffer Jr. 1980. Atlas of North American freshwater fishes. Pub. No.1980-12 North Carolina Biol. Surv., North Carolina State Mus. Natur. Hist., Raleigh, NC. 867 p.
- Lepla, K.B. 1994. White sturgeon abundance and associated habitat in Lower Granite Reservoir, Washington. M.S. Thesis, Univ. Idaho, Moscow, ID. 77 p.
- Liebelt, J.E. 1970. Studies of the behavior and life history of the mountain whitefish,

- Prosopium williamsoni* (Girard). Ph.D. Thesis, Montana State Univ., Logan, MT. 45 p.
- MacPhee, C. 1960. Postlarval development and diet of the largescale sucker, *Catostomus macrocheilus*, in Idaho. *Copeia* 2:119-125.
- McAfee, W.R. 1966. Mountain whitefishes, p. 299-303. *In* A. Calhoun (editor) *Inland Fisheries Management*. California Dep. Fish Game.
- McCabe Jr., G.T., and C.A. Tracy. 1994. Spawning and early life history of white sturgeon, *Acipenser transmontanus*, in the lower Columbia River. *Fish. Bull.* 92:760-772.
- McCabe Jr., G.T., R.L. Emmett, and S.A. Hinton. 1993. Feeding ecology of juvenile white sturgeon (*Acipenser transmontanus*) in the Lower Columbia River. *NW Sci.* 67(3): 170-180.
- McCammon, G.W. 1956. A tagging experiment with channel catfish (*Ictalurus punctatus*) in the lower Colorado River. *Calif. Fish Game* 42(4):323-335.
- McCart, P., and N. Aspinwall. 1970. Spawning habits of the largescale sucker, *Catostomus macrocheilus*, at Stave Lake, British Columbia. *J. Fish. Res. Board Can.* 27(6):1154-1158.
- McGinnis, S.M. 1984. *Freshwater fishes of California*. Univ. California Press, Berkeley, CA 316 p.
- McHugh, J.L. 1940. Food of the Rocky Mountain whitefish *Prosopium williamsoni* (Girard). *J. Fish. Res. Board Can.* 5(2):131-137.
- McPhail, J.D., and C.C. Lindsey. 1970. *Freshwater fishes of northwestern Canada and Alaska*. *Fish. Res. Board Can., Bull.* 173. 381 p.
- Meehan, W.R., and T.C. Bjornn. 1991. Salmonid distributions and life histories, p. 47-82. *In* W.R. Meehan (editor) *Influences of forest and rangeland management on salmonid fishes and their habitats*. Amer. Fish. Soc. Spec. Pub. 19.

- Meehan, W.R., and T.C. Bjornn. 1991. Salmonid distributions and life histories, p. 47-82. *In* W.R. Meehan (editor) Influences of forest and rangeland management on salmonid fishes and their habitats. Amer. Fish. Soc. Spec. Pub. 19.
- Miller, A.I., and L.G. Beckman. 1993. Age and growth of juvenile white sturgeon in the Columbia River downstream from McNary Dam. *In* R.C. Beamesderfer and A.A. Nigro (editors) Status and habitat requirements of white sturgeon in the Columbia River downstream from McNary Dam. Vol. 1 Final Rep. (Cont. No. DE-AI79-86BP63584) to Bonneville Power Ad., Portland, OR.
- Miller, A.I., and L.G. Beckman. 1996. First record of predation of white sturgeon eggs by sympatric fishes. Trans. Am. Fish. Soc. 125:338-340.
- Miller, E.E. 1966. Channel catfish, p. 440-463. *In* A. Calhoun (editor) Inland Fisheries Management, Calif. Dep. Fish Game. 546 p.
- Moore, J.W., and J.M. Mallat. 1980. Feeding of larval lamprey. Can. J. Fish. Aquat. Sci. 37:1658-1664.
- Moyle, P.B. 1976. Inland fishes of California. Univ. Calif. Press, Berkeley. 405 p.
- Mullan, J.W. 1987. Status and propagation of chinook salmon in the mid-Columbia River through 1985. U.S. Fish Wildl. Serv., Biol. Rep. 87(3) 111 p.
- Munther, G. L. 1970. Movement and distribution of smallmouth bass in the Middle Snake River. Trans. Amer. Fish. Soc. 99(1):44-53.
- Musick, J.A., and 17 other authors. 2000. Marine, estuarine, and diadromous fish stocks at risk of extinction in North America (exclusive of Pacific salmonids). Fisheries 25(11):6-30.
- Narver, D.W. 1976. Stream management for West Coast anadromous salmonids, p. 7-13. *In* Stream management of salmonids, Trout. Winter 1976 Suppl.
- Nelson, J.S. 1968. Hybridization and isolating mechanisms between *Catostomus*

- commersonii* and *C. macrocheilus* (Pisces: Catostomidae). J. Fish. Res. Board Can. 25(1):101-150.
- North, J.A., R.C. Beamesderfer, and T.A. Rien. 1993. Distribution and movements of white sturgeon in three Lower Columbia River reservoirs. NW Sci. 67(2):105-111
- Northcote, T.G., and G.L. Ennis. 1994. Mountain whitefish biology and habitat use in relation to compensation and improvement possibilities. Rev. Fish. Sci. 2(4):347-371.
- Paragamian, V.L. 1991. Stream sedimentation and abundance of smallmouth bass, p. 55-60. In D.C. Jackson (editor) The first international smallmouth bass symposium, Mississippi Agr. Forest. Exp. Sta., Mississippi State Univ.
- Parsley, M.J., L.G. Beckman, and G.T. McCabe, Jr. 1993. Spawning and rearing habitat use by white sturgeons in the Columbia River downstream from McNary Dam. Trans. Am. Fish. Soc. 122:217-227.
- Patten, B.G., R.B. Thompson, and W.D. Gronlund. 1970. Distribution and abundance of fish in the Yakima River, Wash., April 1957 to May 1958. U.S. Fish Wildl. Serv., Spec. Sci. Rep., Fish. No. 603. 31 p.
- Pauley, G.B., B.M. Bortz, and M.F. Shepard. 1986. Species profiles: life histories and environmental requirements of coastal fishes and invertebrates (Pacific Northwest) – steelhead trout. U.S. Fish Wildl. Serv. Biol. Rep. 82(11.62). U.S. Army Corps of Engineers, TR EL-82-4. 24 p.
- Peterson, N.P. 1982. Immigration of juvenile coho salmon (*Oncorhynchus kisutch*) into riverine ponds. Can. J. Fish. Aquat. Sci. 39:1308-1310.
- Pettit, S.W., and R.L. Wallace. 1975. Age, growth, and movement of mountain whitefish, *Prosopium williamsoni* (Girard), in the North Fork Clearwater River, Idaho. Trans. Am. Fish. Soc. 104(1):68-76.
- Peven, C.M. 1990. The life history of naturally produced steelhead trout from the Mid-

- Columbia River basin. M.S. Thesis, Univ. Washington, Seattle, WA. 96 p.
- Pike, G.C. 1951. Lamprey marks on whales. J. Fish. Res. Board Can. 8(4):275-280.
- Pletcher, T.F. 1963. The life history and distribution of lampreys in the Salmon and certain other rivers in British Columbia. M.S. Thesis, Univ. British Columbia., Vancouver, BC 195 p.
- Pontius, R.W., and M. Parker. 1973. Food habits of the mountain whitefish, *Prosopium williamsoni* (Girard). Trans. Am. Fish. Soc. 102(4):764-773.
- Rajagopal, P.K. 1979. The embryonic development and the thermal effects on the development of the mountain whitefish, *Prosopium williamsoni* (Girard). J. Fish Biol. 15(2):153-158.
- Raleigh, R.F., T. Hickman, R.C. Solomon, and P.C. Nelson. 1984. Habitat suitability information: rainbow trout. U.S. Dep. Interior, Fish Wildl. Serv. FWS/OBS-82/10.60. 64 p.
- Reimers, P.E., and C.E. Bond. 1967. Distribution of fishes in the tributaries of the lower Colombia River. Copeia 3:541-550.
- Riehle, M.D., and J.S. Griffith. 1993. Changes in habitat use and feeding chronology of juvenile rainbow trout (*Oncorhynchus mykiss*) in fall and the onset of winter in Silver Creek, Idaho. Can. J. Fish. Aquat. Sci. 50:2119-2128.
- Roff, T.J., and B.R. Mate. 1984. Abundances and feeding habits of pinnipeds in the Rogue River, Oregon. J. Wildl. Manage. 48(4):1262-1274.
- Ryder, R.A. 1977. Effects of ambient light variations on behavior of yearling, subadult, and adult walleye (*Stizostedion vitreum vitreum*). J. Fish. Res. Board Can. 34(10):1481-1491.
- Sandercock, F.K. 1991. Life history of coho salmon (*Oncorhynchus kisutch*), p. 395-445. In C. Groot and L. Margolis (editors) Pacific salmon life histories. Univ. British Columbia Press, Vancouver.
- Schramm, H.L., M. Ednoff, and B. French. 1984. Depredation of channel catfish by Florida double-crested cormorants. Prog. Fish-Cult. 46(1):41-43.

- Scott, W.B. 1960. Summaries of current information on round whitefish and mountain whitefish. Ontario Dep. Lands Forests, Res. Inform. Paper (Fish.) No. 8. 19 p.
- Scott, W.B., and E.J. Crossman. 1973. Freshwater fishes of Canada. Fish. Res. Board Can. Bull. No. 184 966 p.
- Semakula, S.N., and P.A. Larkin. 1968. Age, growth, food, and yield of the white sturgeon (*Acipenser transmontanus*) of the Fraser River, British Columbia. J. Fish. Res. Board Can. 25: 2589-2602.
- Serns, S.L. 1984. First-summer survival, eggs to juvenile, of smallmouth bass in Nebish Lake, Wisconsin. Trans. Amer. Fish. Soc. 113:304-307.
- Sigler, W.F. 1951. The life history and management of the whitefish *Prosopium williamsoni* (Girard) in Logan River Utah. Utah State College. Agr. Exp. Bull. 347. 21 p.
- Sigler, W.F., and J.W. Sigler. 1987. Fishes of the Great Basin, a natural history. Univ. Nevada Press, Reno, NV. 425 p.
- Simpson, J.C., and R.L. Wallace. 1982. Fishes of Idaho. Univ. of Idaho Press, Moscow, ID 238 p.
- Smith, W.E., and R.W. Saalfeld. 1955. Studies on Columbia River smelt, *Thaleichthys pacificus* (Richardson). Washington Dep. Fish., Fish. Res. Papers 1(3):3-26.
- Stalnaker, C.B., and R.E. Gresswell. 1974. Early life history and feeding of young mountain whitefish. U.S. Environmental Protection Agency, Ecol. Res. Ser. Proj. 18050 DPL. EPA-660/3-73-019.
- Stephenson, S.A., and W.T. Momot. 1991. Food habits and growth of walleye, *Stizostedion vitreum*, smallmouth bass, *Micropterus dolomieu*, and northern pike, *Esox lucius*, in the Kaministiquia River, Ontario. Can. Field Nat. 105(4):517-521.
- Tabor, R.A., R.S. Shively, and T.P. Poe. 1993. Predation of juvenile salmonids by

- smallmouth bass and northern squawfish in the Columbia River near Richland, Washington. N. Amer. J. Fish. Manage. 13:831-838.
- Thompson, K. 1972. Determining stream flows for fish life, p. 31-50. In A transcript of proceedings of the instream flow requirements workshop. Pacific NW River Basins Comm., Vancouver, WA.
- Thompson, G.E., and R.W. Davies. 1976. Observations on the age, growth, reproduction, and feeding of mountain whitefish (*Prosopium williamsoni*) in the Sheep River, Alberta. Trans. Am. Fish. Soc. 105(2):208-219.
- Todd, B.L., and C.F. Rabeni. 1989. Movement and habitat use by stream-dwelling smallmouth bass. Trans. Amer. Fish. Soc. 118(3):229-242.
- Underwood, T.J., and D.H. Bennett. 1992. Effects of fluctuating flows on the population dynamics of rainbow trout in the Spokane River of Idaho. NW Sci. 66(4):261-268.
- Waknitz, F.W., G.M. Matthews, T. Wainwright, and G.A. Winans. 1995. Status review for mid-Columbia River summer chinook salmon. U. S. Dep. Com., NOAA Tech. Memo. NMFS-NWFSC-22. Nat. Mar. Fish. Serv., Seattle, WA. 16 p.
- Wang, Y.L., F.P. Binkowski, and S.I. Doroshov. 1985. Effect of temperature on early development of white and lake sturgeon, *Acipenser transmontanus* and *A. fulvescens*, p. 43 to 50. In F.P. Binkowski and S.I. Doroshov (editors) North American sturgeons: biology and aquaculture potential. Dr. W. Junk Publishers, Dordrecht, Netherlands.
- Wang, Y.L., R.K. Buddington, and S.I. Doroshov. 1987. Influence of temperature on yolk utilization by white sturgeon, Acipenser transmontanus. J. Fish Biol. 30:263-271.
- Warren, J.J., and L.G. Beckman. 1993. Fishway use by white sturgeon to bypass mainstem Columbia River dams, p. 119-136. In R.C. Beamesderfer and A.A. Nigro (editors) Status and habitat requirements of the white sturgeon populations in the Columbia River downstream of McNary Dam. Final Rep. of Res. Vol. I Jul 1986 - Sept 1992. Bonneville Power Admin., Proj. No. 86-50, Cont. No. DE-AI79-86BP63584. Portland, OR.

- Weitkamp, L.A., T.C. Wainwright, G.J. Bryant, G.B. Milner, D.J. Teel, R.G. Kope, and R.S. Waples. 1995. Status review of coho salmon from Washington, Oregon, and California. U. S. Dep. Com., NOAA Tech. Mem. NMFS-NWFSC-24. 258 p.
- Withler, I.L. 1966. Variability in life history characteristics of steelhead trout (*Salmo gairdneri*) along the Pacific Coast of North America. J. Fish. Res. Board Can. 23(3):365-393.
- Wydoski, R.S., and R.R. Whitney. 1979. Inland fishes of Washington. Univ. Washington Press. 220 p.
- Zimmerman, M.P. 1999. Food habits of smallmouth bass, walleye, and northern pikeminnow in the lower Columbia River basin during outmigration of juvenile anadromous salmonids. Trans. Amer. Fish. Soc. 128:1036-1054.



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**COLUMBIA RIVER BASIN FISH
CONTAMINANT SURVEY**

**VOLUME I
Appendix C**

Toxicity Profiles

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**Prepared by
U.S. Environmental Protection Agency
Region 10
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CRITFC TOXICOLOGICAL PROFILES

OVERVIEW:

Using toxicology data to develop risk factors for non-cancer and cancer:

The EPA has developed factors which describe the chronic toxicity of chemicals in a quantitative manner. The methodology to develop quantitative toxicity factors is a systemic approach to organizing scientific information in a consistent, transparent fashion. There are different methods for cancer endpoints and for non-cancer endpoints. Mathematically combining the toxicity factors with concentrations of chemicals which contact the human body (by ingestion or other exposure routes) provides a tool for ranking chemical concentrations and focusing efforts on exposures where additional public health investigations, remedial measures or other actions may be warranted. Chronic toxicity is that which occurs following consistent, long term exposures. The EPA generally defines these long term exposures to be greater than 10% of a lifespan, or approximately 7 years.

The methodology for developing a chemical-specific quantitative toxicity factor for non-cancer effects, known as a Reference Dose (RfD), begins by reviewing all the known adverse non-cancer health effects associated with human or animal exposures to the chemical. The adverse health effect which occurs at the lowest exposure is identified, and that information is carried forward through the RfD methodology. When the data are sufficient, the exposure associated with no observed adverse health effects (called the NOAEL, the no-observed-adverse-effect-level) is the numeric value used to develop the RfD. Although separate RfDs could be developed for each possible adverse health effect caused by a chemical, for the purposes described above (for focusing and deciding about additional efforts) the effect at the lowest exposure is used. Decision rules in the RfD methodology direct the choice of uncertainty factors which are applied to the exposure estimate (the NOAEL or, when a NOAEL is not available, the lowest known exposure). Uncertainty factors can range from a value of 3 to 10,000 with the lowest values indicating strong human evidence and a high degree of confidence in the information. The resulting RfD is an estimated daily human exposure, including sensitive populations, that is likely to be without an appreciable risk of deleterious effects during a lifetime. Even when an RfD has a low uncertainty factor value (indicating high confidence), difficulties in estimating true long term exposures mean that predicting any individual person's health outcome is not possible by this method. However as stated previously, this approach is useful focusing and deciding about additional efforts.

The methodology for developing a chemical-specific cancer factor, known as a Cancer Slope Factor or Cancer Potency Factor, begins in a similar fashion by assembling all reports of cancer effects associated with human or animal exposures to the chemical. The scientific data is first

summarized with respect to the likelihood that exposure could result in human cancer. Only in the case where evidence clearly indicates human exposures resulting in confirmed cancer is a

chemical given a weight-of-evidence classification of “A”, known human carcinogen. In all other cases, a lesser classification is given ranging from “B1” to “D”. The “B1” weight-of-evidence classification indicates that experimental animal evidence is strong but that human evidence is limited. The “B2” weight-of-evidence classification indicates sufficient animal evidence but no human evidence is available. While the “C” weight-of-evidence classification indicates that only limited animal evidence is available. And, “D” indicates that there is not enough scientific data for a classification. In the future, the “A” through “D” classifications will be discontinued and only verbal descriptors will be used.

Once classified, the data which provides the greatest scientific rigor is chosen for mathematical modeling. Modeling is necessary because information is needed for the purposes described above (for focusing and deciding about additional efforts). In contrast, the available data are for exposures which are much higher than those expected from contact with environmental media. Additionally, present day scientific methods are not sensitive enough to measure effects which occur at environmental exposure levels. Hence, a model is used to extrapolate results from higher to lower exposures. When no other data is available, the model assumes that the cancer response which occurs at higher exposures is the same at lower exposures.

The resulting Cancer Slope Factor or Cancer Potency Factor is a probability estimate for the occurrence of cancer without regard to severity or significance of the cancer. Stated in another way, it is a probability of the occurrence (or incidence) of any type of cancer and not the probability of death due to cancer. It is a numeric statement of risk associated with a consistent, long term (chronic) exposure dose. The higher the value of the Cancer Slope Factor or Cancer Potency Factor, the higher the likelihood that cancer may be associated with the estimated chronic exposure dose. Due to the use of extrapolation and the uncertainties with estimating true long term exposures, even when a chemical has an “A” weight-of-evidence classification predicting any individual person’s cancer outcome is not possible by this method. However as stated previously, this approach is useful for focusing and deciding about additional efforts.

TOXICOLOGICAL PROFILES

PESTICIDES:

Aldrin: (1R,4S,4aS,5S,8R,8aR)-1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-dimethanonaphthalene; CASRN 309-00-2 (See also Dieldrin)

Aldrin belongs to the “cyclodiene” series of chlorinated pesticides, which also includes the related compounds Dieldrin, Endrin, Chlordane, Heptachlor, and Heptachlor epoxide. Aldrin’s chemical nomenclature is also sometimes abbreviated as HHDN. As a pesticide residue, Aldrin, *per se*, is rarely detected in its original chemical form. This is because in the environment, and when sequestered in biota, Aldrin quickly undergoes epoxidation, to form the (very stable and persistent, and very similar in toxicity) compound, Dieldrin. Therefore, much of the Dieldrin detected in the global environment today may have originally been applied to the environment as either Dieldrin *per se*, or as Aldrin.

From the 1950's until the early 1960's, both Aldrin and Dieldrin were applied extensively as pesticides in the United States, especially on crops such as corn and cotton. They were also used extensively in the extermination of termites in soil, until these uses were banned by EPA in 1974. At the present time, all uses of both Aldrin and Dieldrin in the USA have been canceled. Because of the persistence and slow degradation of aldrin/dieldrin, small quantities of dieldrin are still occasionally detected at low levels in various environmental samples.

Like other organochlorine insecticides, the primary target of acute poisoning from aldrin and dieldrin is the nervous system. Severe acute exposures to these cyclodiene insecticides can result in sudden onset of convulsions, as well as other manifestations like headache, dizziness, nausea, vomiting, incoordination, tremor and mental confusion. A second specific target organ for aldrin/dieldrin—especially at lower doses over time—is the liver. In animal studies, aldrin/dieldrin have also been shown to be developmental toxicants. The Oral Reference Dose (RfD) for Aldrin is 3E-5 mg/kg/day, based on a critical effect of liver toxicity observed in an oral rat feeding study. The rat Lowest Observable Adverse Effect Level (LOAEL) was 0.025 mg/kg/day. No NOAEL was established from this study. Uncertainty factor is 1000, because of the lack of a NOAEL, and to allow for animal to human extrapolation, and for variability within human populations. Confidence in the RfD is medium.

Aldrin and Dieldrin are both classified by EPA as Group B2 (possible human) carcinogens. This is based on observations of significant tumor response after oral dosing studies in three strains of mice. In addition, five related chemicals—dieldrin, chlordane, heptachlor, heptachlor epoxide and chlorendic acid have also induced malignant tumors in similar mouse bioassay studies.

The oral carcinogenicity slope factor for Aldrin is 1.7E+1 mg/kg/day; essentially identical to the slope factor value—1.6E+1 mg/kg/day which has been calculated independently for Dieldrin.

Dieldrin: (1R,4S,4aS,5R,6R,7S,8S,8aR)-1,2,3,4,10,10-hexachloro-1,4,4a,5,6,7,8,8a-octahydro-6,7-epoxy-1,4:5,8-dimethanonaphthalene; CASRN 60-57-1

Dieldrin is structurally related to various other pesticide compounds (“cyclodienes”) which are known to produce tumors in rodents. These related compounds include aldrin, endrin, chlordane, heptachlor, and heptachlor epoxide. Dieldrin’s chemical nomenclature is sometimes abbreviated as HEOD. Dieldrin is no longer used as a pesticide in the United States. However, its relative persistence and lipophilicity enables it to still occur as a contaminant in various environmental media, as a result of past use. Dieldrin in the environment is also a result of the past use of its close relative, Aldrin, which is converted via natural processes into the more stable and persistent dieldrin.

Organochlorine pesticides like aldrin and dieldrin are neurotoxicants, for which acute signs of toxicity can include: hyperexcitability, seizures, convulsions and dizziness. Chronic signs of toxicity include: intermittent muscle twitching, psychological disorders, loss of consciousness and convulsions.

The oral RfD, 5E-5 mg/kg/day, is based on a two-year rat study which observed liver abnormalities (increased liver weight and liver /body weight ratio). NOAEL from the rat data was 0.005 mg/kg/day. LOAEL was 0.05 mg, kg/day. An uncertainty factor of 100 is used to account for interspecies variability (subfactor of 10) and for sensitive subpopulations (subfactor of 10). Confidence in the RfD is medium because the study is older, has relatively little detailed data, and lacks reproductive studies.

The weight of evidence for carcinogenicity for dieldrin is classified as B2 (probable human carcinogen), and is based upon carcinogenic effects in various strains of mice when administered orally. However, several similar studies with various strains of rats of both sexes did not produce positive results for carcinogenicity, thus making the available rodent data somewhat equivocal.

The oral carcinogenicity slope factor for Dieldrin is 1.6E+1 mg/kg/day.

Chlordane: 1,2,4,5,6,7,8,8-Octachloro-2,2,2a,4,7,7a-hexahydro-4,7-methano-1H-indene;
CASRN 12789-03-6 (for technical chlordane)

Technical Chlordane is not a single chemical, but is a mixture of several closely related chemicals, which consist of some of the various chlordane isomers and metabolites listed below.

<u>alpha-Chlordane:</u>	CASRN 5103-71-9
(<i>cis</i> -Chlordane)	
<u>gamma-Chlordane:</u>	CASRN 5103-74-2
(<i>trans</i> -Chlordane)	
<u>oxy-Chlordane:</u>	CASRN 27304-13-8
<u>alpha-Chlordene:</u>	CASRN 56534-02-2
<u>gamma-Chlordene:</u>	CASRN 56631-38-4
<u>cis-nonachlor:</u>	CASRN 5103-73-1
<u>trans-nonachlor:</u>	CASRN 39765-80-5

Chlordane belongs to the cyclodiene group of pesticides, and is structurally quite similar to Heptachlor, and Heptachlor Epoxide. In many instances, Heptachlor is also a minor component of technical Chlordane. Other cyclodiene pesticides in this general chemical group include Aldrin, Dieldrin, Endrin, and Endosulfans I and II.

Chlordane does not occur naturally in the environment. It was commonly used as a pesticide in the USA from the late 1940's until the late 1980's. Until 1983, it was used on corn and citrus, and also lawns and gardens. Prior to EPA's banning of all uses of chlordane in 1988, it was also used for structural pest control, especially around slab housing foundations in warm climates. Like most of the other cyclodiene pesticides, chlordane degrades very slowly. Various of its metabolites can stay in soil for over 20 years, and can bioaccumulate in the tissues of higher organisms.

Exposure to chlordane occurs mostly from eating contaminated foods, such as root crops, meats, fish, and shellfish, or from touching contaminated soil. In people and animals, acute exposure to chlordane affects primarily the nervous system, the digestive system, and the liver. Sufficiently large oral doses can cause convulsions and death. The oral RfD for chlordane is 5E-4 mg/kg/day. This is based on a 104 week mouse feeding study, from which a NOAEL of 0.15 mg/kg/day was established. LOAEL from this study was 0.75 mg/kg/day. The critical effect toxic endpoint at low dose was hepatic necrosis. IRIS lists an overall uncertainty factor of 300 for this RfD. Confidence in the RfD is medium.

For carcinogenicity, IRIS lists Chlordane in Group B2 (probable human carcinogen). This designation is based on findings of hepatocellular carcinoma in mice, and hepatocellular adenomas in rats which had been orally dosed during various chronic laboratory studies.

The oral carcinogenic slope factor for Chlordane is 3.5E-1 mg/kg/day.

With respect to the specific individual components of the typical chlordane mixture (see above listings for names and CAS Nos.), relatively little toxicological information is available. No

RfDs or slope factors have been developed for these various chlordane isomers and metabolites. Because of structure-activity relationships, it is likely that their toxicities and critical target effects are somewhat similar in the general sense, to those of chlordane *per se*.

For Alpha-Chlordene-apparently one of the least acutely toxic members of this cyclodiene group-the Registry for Toxic Effects of Chemical Substances (RTECS) lists a rat acute oral LD50 of 10,200 mg/kg. This makes it about one twentieth as acutely toxic as Chlordane (Acute LD50: 367 - 515 mg/kg), at least to the rat.

Chlorpyrifos: chlorpyrifos-ethyl; O,O-diethyl,O-(3,5,6-trichloro-2-pyridinyl)phosphorothioate; CASRN 2921-88-2

Chlorpyrifos is a widely-used organophosphate pesticide. It is also known as “chlorpyrifos ethyl”. Chlorpyrifos was first marketed in 1965, and came into greatly increased use after 1988, when restrictions and bans were imposed on the pesticide chlordane for termite applications. Chlorpyrifos is rather atypical among the organophosphate pesticide group, because it also possesses a high degree of chlorination. This chlorination imparts certain properties not typically noted for this general class of compounds; making chlorpyrifos somewhat more difficult to degrade in the environment, and more lipid soluble. Chlorpyrifos is thus poorly water soluble, adsorbing readily to soil and sediment, and more persistent than most other pesticides in this general group.

Although few epidemiology studies on this pesticide have been undertaken, the EPA has recently concluded that chlorpyrifos is one of the leading causes of insecticide poisoning in the United States. Data from 1993-94 indicate that some 4000 - 5000 cases of accidental chlorpyrifos exposure were reported. As with all reports of pesticide exposure and poisoning symptoms, this estimate probably underestimates the true extent of the problem. It is estimated that chlorpyrifos is applied to homes and lawns about 20 million times annually. The widespread use of this pesticide in households to control fleas, termites and other pests, as well as many uses on agricultural crops has also resulted in its increasingly frequent detection as a residue at low concentrations in recent years. In a 1993 environmental review of the environmental fate of chlorpyrifos, bioconcentration factors (BCF) were reported in a variety of fish under both field and experimental conditions. The upper range of these BCF were as high as 5100, which suggests that bioconcentration of chlorpyrifos is moderate to very high.

Because of reports of toxicity and other problems related to its somewhat greater persistence, the manufacturer of chlorpyrifos voluntarily withdrew most of the indoor and pet uses of this chemical in 1997. In July, 2000, EPA also reached an agreement with chlorpyrifos registrants to eliminate and phase out certain food uses, which pose the greatest risks to children. The agreement also cancels and phases out nearly all indoor and outdoor residential uses, and reduces risks to workers. Essential and more low-risk uses of chlorpyrifos such as in containerized baits, non-structural wood treatments, fire ant control and so forth will be allowed to continue.

Like other members of the organophosphate group, the key mechanism of toxic action for chlorpyrifos is inhibition of the enzyme acetylcholinesterase (also called cholinesterase or ChE),

which is essential to the proper functioning of the nervous system. It readily inhibits plasma ChE at low doses, and red blood cell ChE at higher doses. At sufficiently high acute doses, inhibiting cholinesterase enzyme with organophosphate pesticides like chlorpyrifos causes various parasympathomimetic neurologic symptoms like salivation, lacrimation, dizziness, changes in heart rate, nausea, diarrhea, visual problems, muscle weakness or tremors, confusion, etc. There is also recent preliminary information from NIOSH suggesting that exposure to chlorpyrifos might also result in delayed neurological effects, particularly among subjects with a prior history of poisoning.

The widespread and extensive use of this pesticide makes it relatively prevalent at trace levels in

many environmental exposure pathways. In the body, chlorpyrifos is metabolized in the liver to form the major metabolic product, 3,5,6-trichloro-2-pyridinol (TCP). TCP is also a major metabolite of the closely related insecticide, chlorpyrifos-methyl, as well as of the herbicide triclopyr (Garlon). TCP is excreted in the urine, and can typically be found in urine for several days post-exposure to chlorpyrifos. When detected in urine samples by properly equipped analytical laboratories, TCP is a significant biomarker indicative of possible recent chlorpyrifos exposure. It is estimated by NIOSH that approximately 82 per cent of U.S. adults have detectable urinary levels of TCP, with a mean level of about 4.5 micrograms per liter in the general U.S. population.

The oral RfD for chlorpyrifos is $3\text{E-}3$ mg/kg/day, based on a 1972 human cholinesterase inhibition study. The NOAEL for this study was 0.03 mg/kg/day, with a LEL of 0.1 mg/kg/day. This RfD has an uncertainty factor of 10, which is the standard factor which is utilized to allow for the range of human sensitivity for cholinesterase (ChE) inhibition. IRIS indicates that confidence in the database is medium. Although several doses were used, only 4 males per dose were studied. However, the experimental data for rats, rabbits, mice, and dogs reveal NOAEL data similar for that noted for humans.

Chlorpyrifos has not undergone a complete evaluation under EPA's IRIS program for evidence of carcinogenic potential. However, like most other organophosphate pesticides, it is not anticipated to have significant carcinogenic activity.

Chlorpyrifos Methyl: O-O-Dimethyl-O-(3,5,6-trichloro-2-pyridinyl) phosphorothioate;
CASRN 5598-13-0

The mechanism of action of chlorpyrifos methyl-cholinesterase inhibition-is essentially identical to that of chlorpyrifos ethyl (chlorpyrifos). Likewise, the environmental behavior and other properties are similar to chlorpyrifos ethyl (see profile for chlorpyrifos).

DDT SERIES

DDT: 1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane; CASRN 50-29-3

DDE: 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene; CASRN 72-55-9

DDD: 1,1,-Dichloro-2,2-bis (p-chlorophenyl) ethane; CASRN 72-54-8

DDMU: 1,1-bis(p-chlorophenyl)-2-chloro-ethylene; CASRN 1022-22-6

DDT, and its structural analogs DDE and DDD, are organochlorine pesticide residues. DDT products are sometimes contaminated with DDE and DDD. DDMU is a breakdown product of the DDT series, and is occasionally detected in environmental media.

DDT and its analogs do not occur naturally in the environment. The DDT group was once used very extensively to control insects on agricultural crops, as well as to control insects which carry diseases like malaria and typhus. In 1972, the EPA banned all uses of DDT in the United States, except for public health emergencies. However, DDT is still utilized in under-developed countries, especially to control malaria.

When DDT is applied to the environment, much of it is gradually changed over time into DDE, which is normally the most prevalent DDT residue found in various environmental media today. DDD is also a breakdown product of DDT. The DDT group lasts a very long time in soil; half the DDT in soil will break down in about 2-15 years, depending on local conditions.

Organochlorine pesticides are neurotoxicants for which acute signs of toxicity include parasthesia, ataxia and dizziness. At high levels, these chemicals can damage the nervous system, causing excitability, tremors, and seizures. Chronic signs of toxicity include anorexia, mild anemia, tremors, seizures, muscular weakness, hyperexcitability and nervous tension. Immunological effects and developmental toxicity have also been associated with DDT. Exposure to DDT, DDE and DDD occurs mostly from eating contaminated foods, such as root and leafy vegetables, meat, fish, and poultry.

The oral RfD for DDT is 5E-4 mg/kg/day, and is based on a chronic rat feeding study (utilizing a mixture of 81 percent p,p' DDT isomer and 19 percent o,p' DDT isomer). Critical effect was hepatocellular hypertrophy (liver lesions) in the exposed population. The NOAEL was 0.5 mg/kg/day, based on a daily dose of 1 part per million in the diet. The LOAEL for DDT was calculated at fivefold this dosage (0.25 mg/kg/day). Male rats were more sensitive to the low-dose effects of DDT than were female rats. An uncertainty factor of 100 is used to account for interspecies conversion (sub-factor of 10) and to protect sensitive human subpopulations (sub-factor of 10). Confidence in the RfD is medium to low, because the study was of shorter duration, and lacked a clear NOAEL for reproductive effects. IRIS does not list specific RfD's for DDE or DDD. However, because their structures and toxicities so closely resemble that of DDT, for purposes of this study we will assume that they (and their various ortho- and para-isomers) also have the same RfD as DDT.

The cancer weight of evidence for DDT, DDE, and DDD is classified as "B2" (probable human

carcinogen). The carcinogenic slope factor for both DDT and DDE is $3.4\text{E-}1\text{mg/kg/day}$. For DDT, this is based on the observation of tumors (usually liver) in various laboratory studies of orally-dosed mice and rats. For DDE, the slope factor is based on the incidence of liver tumors including carcinomas in two strains of mice, and in hamsters, as well as thyroid tumors in dietary-dosed female rats. DDD, which is considered less toxic than DDT, has a cancer slope factor of $2.4\text{E-}1\text{ mg/kg/day}$, based on an increased incidence of lung tumors in male mice, liver tumors in female mice, and thyroid tumors in male rats.

Limited toxicity information is available for DDMU. According to RTECS database, the mouse oral LD50 for DDMU is 2700 mg. kg, with tremor and behavioral changes being the most noteworthy signs of acute toxicity. At this time, no oral RfD, carcinogenicity evaluation, or oral carcinogenic slope factor are available for DDMU.

For purposes of this report, cancer and non-cancer risks from the DDT series will be respectively expressed as the sums of the individual risks of the para-para and ortho-para isomers of DDT, DDE, and DDD.

Methoxychlor: 2, 2-bis(p-methoxyphenyl)-1,1,1-trichloroethane; methoxy DDT; CASRN 72-43-5

Methoxychlor is essentially a less-toxic form of the organochlorine pesticide, DDT, in which a methoxy group replaces the (more persistent and biologically active) chlorine molecule on one of the phenyl groups of the basic DDT molecule (see toxicology profiles for DDT series).

Methoxychlor is also considered to have estrogenic activity, both *in vivo* and *in vitro*. Recent evidence published in the literature at large indicates that both methoxychlor and its metabolites have estrogen-like activity, with several metabolites having proestrogen activity.

The oral RfD for methoxychlor is $5\text{E-}3\text{ mg/kg/day}$, based on a 1986 rabbit teratology study in which the critical toxicologic endpoint was excessive litter loss. NOAEL from this study was 5.01 mg/kg/day , with a Lowest Effect Level (LEL) of 35.5 mg/kg/day . IRIS shows uncertainty factor of 1000 applied to this RfD, to account for the inter-and intra-species differences. An additional factor of 10 was used to account for the poor quality of the critical study and for the incompleteness of the data base on chronic toxicity. Confidence in the data, and the RfD, is low.

In terms of likelihood for possible carcinogenicity, EPA/IRIS has classified methoxychlor in Group D (not classified as to human carcinogenicity). This is due to the unavailability of human data, and the inconclusive nature of existing evidence from animal studies regarding carcinogenicity of this substance. Methoxychlor has been assayed for carcinogenicity in numerous chronic dietary, dermal, and injection studies in rats and mice, as well as a limited oral study in dogs. Regulatory bodies including the National Cancer Institute (NCI, 1978), International Agency for Research on Cancer (IARC, 1979), and the EPA (EPA, 1987) have all concluded that the experimental evidence in animals does not support the contention that methoxychlor is a carcinogen.

Dichlorobenzophenone (Dicofol pesticide metabolite): CASRN 90-98-2

4,4'-Dichlorobenzophenone is a major breakdown product of the organochlorine pesticide, Dicofol (2,2,2-trichloro-1,1-bis(4-chlorophenyl)ethanol; also known under the trade name of “Kelthane”), CASRN 115-32-2. Alkaline hydrolysis of dicofol in the environment produces dichlorobenzophenone and chloroform. Under anaerobic incubation, dicofol has a half life of less than 30 days, degrading to 4,4'-dichlorobenzhydrol and 1,1'(p-chlorohenyl)-2,2-dichloroethanol.

Dicofol is structurally very similar to DDT and Methoxychlor (see toxicological profiles for these related compounds), and was initially registered in 1957 as a foliar spray on agricultural crops and ornamentals, and in or around agricultural and domestic buildings for mite control. It was at one time heavily used to control mites on cotton and citrus crops.

In the ensuing years after its introduction, dicofol products were subsequently found to contain a number of DDT analogs as manufacturing contaminants. These impurities included the o,p' and p,p' isomers of DDT, DDE, DDD, and a substance called “extra -chlorine DDT”, or tetrachloro-DDT. In May, 1986, EPA required that these DDT contaminants be reduced to less than 2.5 per cent, in the technical grade dicofol compound. Because the major manufacturer was technically unable to meet these requirements, EPA ordered an immediate halt in September, 1986 to the distribution and sale of dicofol pesticide active ingredients, and cancelled product registrations which contained dicofol as an active ingredient. A significant component underlying this decision was based on the need to protect peregrine falcons and other raptor populations--as well as aquatic organisms--from DDT-mediated reproductive failure.

Endosulfan: 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin-3-oxide; CASRN 115-29-7 (for both isomers together)

Endosulfan I: (Alpha isomer): CASRN 959-98-8

Endosulfan II: (Beta isomer): CASRN 33213-65-9

Endosulfan--also known as Thiodan-- is a manufactured insecticide, and does not occur naturally. It is used to control various insects on food crops like grains, tea, fruits and vegetables, as well as on nonfood crops like cotton and tobacco. It is also used as a wood preservative. It has not been produced in the USA since 1982; however it is still used here to produce other chemicals.

Organochlorine pesticides like endosulfan and related compounds are neurotoxicants, for which acute signs of toxicity include: hyperexcitability, seizures, convulsions and dizziness. Chronic signs include: intermittent muscle twitching, psychological disorders, loss of consciousness and convulsions. Neurological effects have been demonstrated at high doses. In animal studies, long-term exposure to low levels of endosulfan have been shown to affect the kidney (glomerulonephritis), testes, and liver. Effects on the immune system, and decreased weight gain were also noted. Developmental toxicity (rat) has also been associated with endosulfan in

laboratory feeding studies.. Exposure to endosulfan occurs mainly from eating contaminated food.

Endosulfan, as the usual mixture consisting of alpha and beta isomers, has an oral RfD of 6E-3 mg/kg/day, based on laboratory oral feeding studies in two animal species. One set of data was generated from a 1989 2-year rat feeding study. The endosulfan rat NOAELs were 0.6 mg/kg/day (male), and 0.7 mg/kg/day (female). LOAEL for male rats was 2.9 mg/kg/day, while the female rat LOAEL was 3.8 mg/kg/day. Critical toxicologic endpoints were reduced body weight gain in both sexes, and increased incidence of marked progressive glomerulonephritis (kidney damage) and blood vessel aneurysms in males. Other data supporting this RfD come from a 1989 one-year dog feeding study, in which decreased weight gain was noted in males, and neurologic findings were seen in both sexes. NOAEL for the dog feeding study was 0.57 mg/kg/day, with a LOAEL of 1.9 mg/kg/day (females) and 2.1 mg/kg/day (males). An uncertainty factor of 100 is used to account for intraspecies variability (subfactor of 10) and interspecies extrapolations (subfactor of 10). Confidence in the RfD is medium, due to the lack of developmental data in a second species.

Note: for this report, this oral endosulfan RfD (6E-3 mg/kg/day) will also be assumed to be applicable for both alpha and beta isomers because of their similar toxicities.

At this time endosulfan and its isomers have not been fully evaluated and classified by EPA/IRIS for evidence of carcinogenicity.

Endosulfan Sulfate: CASRN 1031-07-8

This compound is an endosulfan reaction product (from either oxidation, biotransformation or photolysis). According to the ATSDR Toxicological Profile for endosulfan, there is very little difference in toxicity between these two products.

At this time, there is no oral RfD listed for endosulfan sulfate, on IRIS or HEAST.

Note: for purposes of this report, the oral RfD for endosulfan sulfate will be assumed to be identical for that set forth in IRIS for endosulfan (6E-3 mg/kg/day).

At this time, endosulfan sulfate has not been fully evaluated and characterized by EPA /IRIS for evidence of carcinogenicity.

Endrin: 1,2, 3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo-endo-1,4:5,8-dimethanonaphthalene; CASRN 72-20-8

Endrin, like aldrin and dieldrin, is also a cyclodiene pesticide, and is the most acutely toxic pesticide of this group. It was formerly used as a pesticide to control insects, rodents, and birds. It has not been produced or sold for general use in the USA since 1986.

Acute human exposure to Endrin has demonstrated severe nervous system toxicity. Other acute signs of toxicity include: hyperexcitability, seizures, convulsions, and dizziness. Chronic signs of toxicity include: intermittent muscle twitching, psychological disorders, loss of consciousness and convulsions. There is also evidence of developmental effects in rodents.

As with other cyclodiene pesticides, the persistence of endrin in the environment depends highly on local conditions. It is estimated that endrin residues may in some instances persist in soil for more than a decade. Exposure to light, or to high temperatures, can also partially degrade endrin to form the closely-related compounds, endrin aldehyde and endrin ketone. Endrin has been found in many foods, but current levels appear to be very low and not of concern for human health. Because of its environmental persistence and its potential to bioconcentrate in aquatic organisms, there has been continued concern as to levels of endrin in fish and shellfish. However, this concern is limited largely to specific sites where endrin was used heavily in agriculture or was discharged by industrial point sources. In 1963, at the height of endrin's agricultural use, levels in catfish poisoned by endrin exceeded 4 ppm during a fish kill. Several more recent national studies, however, indicate that contaminated fish or shellfish are no longer a likely source of potentially high human exposure to this pesticide.

The oral RfD for endrin is $3\text{E-}4$ mg/kg/day, and is based on a dog chronic oral bioassay study which observed mild histological lesions in the liver and kidney, and CNS effects. NOAEL from the dog study was 0.025 mg/kg/day.

LOAEL was 0.05 mg/kg/day. An uncertainty factor of 100 is used (10 fold uncertainty factor for extrapolation from animal to human, and another tenfold factor to account for uncertainty in the threshold for sensitive human populations.) Confidence is medium because the study was of average quality and reproductive data are lacking.

The weight of evidence for carcinogenicity is classified as D (not classifiable), based on findings that the oral administration of endrin did not produce carcinogenic effects in either sex, of two strains of rats and three strains of mice.

Endrin Aldehyde: CASRN 7421-36-3

This compound is a breakdown product, and an impurity, of Endrin. Only one available study was found for this compound, which demonstrated liver dysfunction in rodents. There is no oral RfD or carcinogenicity slope factor for this compound listed on IRIS or HEAST.

Endrin Ketone: CASRN 53494-70-5

This compound is a photodegradation product of Endrin, for which there is currently neither an oral RfD nor a carcinogenicity slope factor. Only one study could be found for this compound. It demonstrated liver dysfunction in rodents.

Heptachlor: 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindene; CASRN 76-44-8.

Heptachlor and Heptachlor Epoxide are cyclodiene pesticide residues, which are closely related to Chlordane. Heptachlor is also frequently a component of technical chlordane (at about 10 per cent). There are no natural sources of heptachlor or heptachlor epoxide. From the early 1950's until the mid-1970's, heptachlor was used to kill insects on seed grains, as well as various food crops. During this period it was also used by both homeowners and professional exterminators to kill termites. It has also been extensively used to kill fire ants.

Organochlorine pesticides such as these, are neurotoxicants for which acute signs of toxicity include: hyperexcitability, seizures, convulsions and dizziness. Chronic signs of toxicity include: intermittent muscle twitching, psychological disorders, loss of consciousness and convulsions. Primary toxicological endpoints for heptachlor are the central nervous system (CNS) and the liver.

Heptachlor has an oral RfD of $5E-4$ mg/kg/day, which is based upon a two-year rat feeding study. Critical effect was liver weight increases in males; also hepatocellular swelling and peripheral arrangements of centrilobular cytoplasmic granules. The NOAEL from this study was 0.15 mg/kg/day. LOAEL (which IRIS describes as the "lowest effect level" (LEL) was 0.25 mg/kg/day. An uncertainty factor of 300 is used to account for interspecies and intraspecies differences (subfactor of 100) and to account for the lack of chronic toxicity data in a second species (subfactor of 3). However, the dog and rat are known to be somewhat similar in sensitivity to this general group of cyclodiene pesticide compounds (see IRIS). Confidence in the RfD is low, due to the low overall quality of the supporting data, and incompleteness of the chronic toxicity information.

The oral cancer slope factor for Heptachlor is $4.5E+0$ mg/kg/day. The weight of evidence for carcinogenicity is classified as B2; there is inadequate human data, but sufficient evidence exists from animal studies in which both benign (hepatic nodules) and malignant (hepatocellular carcinomas) liver tumors were induced in three strains of mice of both sexes.

Heptachlor Epoxide: 1,4,5,6,7,8,8a-heptachloro-2,3-epoxy-3a,4,7,7a-tetra-hydro- 4,7-methanoindene; CASRN 1024-57-3

Heptachlor epoxide is not commercially available in the United States. It is not produced or applied as a pesticide, *per se*. Rather, it is an oxidation breakdown product of Heptachlor, and is present in the environment and in biological samples as a result of the prior or historic use of Heptachlor. Heptachlor epoxide is somewhat more potent toxicologically than heptachlor. Like heptachlor and other cyclodienes, it is neurotoxic, and hepatotoxic. Symptoms of acute poisoning include central nervous system (CNS) stimulatory effects, as with the other cyclodienes.

The oral RfD for heptachlor epoxide is $1.3E-5$ mg/kg/day, taken from a 60 week dog feeding

study, and based on increased liver-to-body weight ratios in both male and female animals. LOAEL (IRIS calls it a “LEL” in this instance) was 0.0125 mg/kg/day. No NOAEL was established from this particular study.

Uncertainty factor is 1000, due to inter and intra species differences (100 subfactor) and to account for the fact that no NOAEL was attained (10-fold subfactor). Confidence in the RfD is low. A 2-generation study in orally dosed dogs also resulted in reproductive toxicity, with pup survival as the critical effect. The reproductive NOEL for this endpoint was 0.125 mg/kg/day, which is ten times the level of the LOAEL derived for the endpoint of liver toxicity. “LEL” for reproductive toxicity was 0.175 mg/kg/day.

For carcinogenicity, Heptachlor epoxide has been classified as B2 (possible human carcinogen), based on findings of liver carcinoma in laboratory dosing studies of two strains of mice of both sexes; also in female rats. The cancer slope factor for Heptachlor epoxide is 9.1E+0 mg/kg/day. Additional evidence for carcinogenicity of both heptachlor and heptachlor epoxide is provided by the fact that several other structurally related compounds in the cyclodiene group are known to be liver carcinogens.

Hexachlorobenzene (HCB): CASRN 118-74-1

Hexachlorobenzene does not occur naturally. It is found as a by-product of various industrial and manufacturing processes involving chlorine-containing compounds. It was also formulated to be used as a pesticide. From the late 1940s until the 1950s, it was extensively used as a fungicidal dressing on seed grains. Until about 1965 it was widely used as a pesticide in the USA. At the present time, there are no commercial uses of HCB in this country. HCB has a half-life in soil of about three to six years. Because of its relative persistence and common occurrence in the environment, very low levels of HCB have been found as a fairly routine contaminant in the fatty tissues of people.

Like other chlorinated organics, the toxicological effects of HCB are primarily upon the nervous system, and the liver.

The oral RfD for HCB is 8E-4mg/kg/day, based on a 130 week, rat oral feeding study. The NOAEL for HCB was 0.08 mg/kg/day, with a LOAEL of 0.29 mg/kg/day. Critical effect was liver damage. Human evidence for the toxicity of HCB is well documented. In a massive epidemic in Turkey in 1955-1959, liver damage (porphyria cutanea tarda) and other adverse effects to multiple organ systems was extensively observed in a population of about 4000 Turkish citizens who accidentally suffered long-term dietary exposure to bread made from grains treated with HCB. Even though there are also an extensive number of high quality animal studies on HCB, confidence in the RfD is medium, with an uncertainty factor of 100 (based on two subfactors of 10, for inter and intra species variability). One source of uncertainty is that the primary animal study was not designed to specifically evaluate the same type of liver damage (porphyria) as was observed in humans. Also, the human data lacked accurate dose and exposure information.

In terms of possible carcinogenicity, HCB has been classified in Group B2 (possible human carcinogen). This is based on studies in three rodent species which indicate that the oral administration of HCB induces liver tumors (the primary target organ), as well as kidney and thyroid tumors. The oral carcinogenic slope factor for HCB is 1.6 E+0 mg/kg/day.

HEXACHLOROCYCLOHEXANE (HCH, formally called BHC), and Isomers:

Technical HCH: CASRN 608-73-1

Alpha HCH: 1-Alpha, 2-alpha, 3-beta, 4-alpha, 5-beta, 6-beta-benzene-*trans*-hexachloride; CASRN 319-84-6

Beta HCH: 1-Alpha, 2-beta, 3-alpha, 4-beta, 5-alpha, 6-beta-hexachlorocyclohexane; CASRN 319-85-7

Gamma HCH (Lindane): 1-Alpha, 2-alpha, 3-beta, 4-alpha, 5-alpha, 6-beta-hexachlorocyclohexane; CASRN 58-89-9

Delta HCH: 1-Alpha, 2-alpha, 3-alpha, 4-beta, 5-alpha, 6-beta-hexachlorocyclohexane; CASRN 319-86-8

Formerly known as Benzene hexachloride (BHC), Technical HCH is a mixture of several isomers. These include the alpha, beta, gamma, and delta isomers of HCH, although an epsilon isomer is also possible in the mix. Of these, only the Gamma HCH isomer is known to possess insecticidal properties, and is primarily a neurotoxicant, with secondary effects on liver and kidney. The gamma isomer of HCH is also known as the pesticide, Lindane. Typically, the Alpha isomer makes up about 65 per cent of technical HCH, while the Gamma HCH isomer constitutes about 10 to 15 per cent. The Beta isomer is the HCH metabolite /isomer which is most commonly found in biological tissues.

Like most other members of the organochlorine series, the HCH compounds are neurotoxicants, stimulatory to the central nervous system. Acute signs of toxicity include paresthesia, ataxia and dizziness. Chronic signs of toxicity include: anorexia, mild anemia, tremors, seizures, muscular weakness, hyperexcitability and nervous tension.

Gamma HCH (Lindane) is used on various crops as a seed treatment for control of wireworms and other soil pests. Additionally, one of its primary uses in the USA and abroad is as a topical treatment for head and body lice, and scabies.

At this time, no RfD is available for Alpha, Beta, or Delta HCH. However, Alpha and Beta HCH isomers have demonstrated liver toxicity in chronic animal exposure studies. Also, the toxicities and target effects of technical HCH and Alpha-HCH are known to be quite similar. Information on the non-cancer effects of Delta-HCH is not extensive in the available literature.

The oral RfD for Gamma HCH (a.k.a. Lindane) is 3E-4 mg/kg/day, and is based on a rat

subchronic oral bioassay study which demonstrated liver and kidney toxicity. Critical effects were liver hypertrophy and kidney tubular degeneration. NOAEL for this rat study was 0.33 mg/kg/day (females). LOAEL (for male rats) was 1.55 mg/kg/day. An uncertainty factor of 1000 is used to account for subchronic vs a chronic study (sub-factor of 10), for interspecies variation (sub-factor of 10), and to protect sensitive human subpopulations (also sub-factor of 10). Confidence in the RfD is medium.

For technical HCH (which is about 65 per cent Alpha-isomer) the weight of evidence for carcinogenicity is classified as Group B2 (probable human carcinogen), based on an increased incidence of liver tumors in four different strains of mice. The oral carcinogenicity slope factor for technical HCH is listed in IRIS at 1.8E+0 mg/kg/day.

Alpha-HCH is also classified as a Group B2 (probable human) carcinogen. Alpha-HCH has a cancer slope factor of 6.3E+0 mg/kg/day. which makes it theoretically somewhat more potent as a carcinogen than technical HCH.

Beta-HCH has the same carcinogenic slope factor potency as technical HCH (slope factor for cancer is 1.8E+0 mg/kg/day) but is classified as a Group C (possible human) carcinogen, rather than as Group B2. Basis for the slope factor and classification is an increase in benign liver tumors in chronic studies of mice fed the beta-isomer.

Evidence for the carcinogenic potential of Gamma-HCH—has recently been somewhat equivocal. (i.e, the Gamma HCH isomer was formerly ranked as a B2-C carcinogen by IRIS.) However, in the past few years this classification and associated slope factor (1.3E+0 mg/kg/day) have been removed from IRIS, and are under further review by EPA.) At this writing, however, HEAST does list the Lindane slope factor at 1.3E+0 mg/kg/day, based on rodent liver tumors, and this value will be utilized for the Gamma HCH/Lindane isomer throughout this assessment.

The Delta isomer of HCH is of course closely related structurally to the carcinogenic technical HCH, as well as to the (also carcinogenic) Alpha and Beta isomers. Despite this structural similarity, the available experimental cancer data regarding the Delta isomer are sufficiently equivocal, that IRIS lists Delta-HCH in Group D (not classifiable as to carcinogenicity). Accordingly, the determination of any carcinogenic slope factor appears inappropriate with respect to this isomer.

Mirex: 1,1a,2,2,3,3a,4,5,5a,5b,6-dodecachlorooctahydro-1,3,4-methano-1H-cyclobuta[cd]pentalene; CASRN 2385-85-5

Mirex is a pesticide which is closely related structurally to the insecticide, Kepone (chlordecone). Mirex was primarily used in this country as a pesticide during the 1960s and 1970s, for control of the invasive “fire ant” in various Southeastern States. It has not been commonly used as a pesticide in the Pacific Northwest. From 1959 to 1972 it was also used as a flame retardant in plastics, rubber, paint, paper, and electrical goods. It has not been manufactured or used in the USA since the late 1970s.

In animal studies, Mirex has been shown to cause multiple harmful effects on various organ systems, including the liver, kidneys, nervous system, thyroid, and digestive and reproductive organs.

The Oral RfD for Mirex is 2×10^{-4} mg/kg/day, based on a rat chronic feeding study. Critical endpoints were liver enlargement, fatty liver and other hepatic changes. Cystic thyroid follicles and angiectasis (vessel dilation) were also noted as critical effects. Uncertainty factor is 300, which reflects 10 for intraspecies variability, 10 for interspecies extrapolation and 3 for lack of a multigenerational data on reproductive effects and cardiovascular toxicity data. Despite this, confidence in the RfD and the available toxicologic database is high, because of the availability of several high quality animal studies.

At this time, inadequate data are available as to potential carcinogenicity of Mirex, and this endpoint has not been fully clarified by EPA. IRIS has previously listed an oral carcinogenic slope factor of 1.8×10^0 mg/kg/day for Mirex, but this number has been withdrawn. EPA has classified Mirex as a Group D (unable to classify as to carcinogenicity).

Pendimethalin: N-(1-ethylpropyl)-3,3-dimethyl-2,6-dinitrobenzenamine; CASRN 40487-42-1

Pendimethalin is a dinitroaniline compound, used as a pre-emergent herbicide. Although its acute oral toxicity to mammals is usually low, pendimethalin is reported to be irritating to skin and eyes. A 1984 Purdue University fact sheet indicates that it is highly toxic to coldwater fish, highly to moderately toxic to warmwater fish, and highly to moderately toxic to freshwater invertebrates. Degradation in the environment is fastest under flooded, anaerobic conditions. The environmental persistence of pendimethalin in flooded soils like rice fields can be as brief as 3 to 7 days. However, in aerobic soils, the half-life of this pesticide can be as great as 28 to 172 days.

The oral RfD for pendimethalin is 4×10^{-2} , taken from data generated from a 1979 feeding study in dogs. The NOAEL was 12.5 mg/kg/day, based on an increase in serum alkaline phosphatase enzymes, increased liver weights, and liver lesions. The uncertainty factor for this RfD is 300, which includes a factor of 3 to account for the lack of an acceptable long-term study in a second species. A factor of 100 is also applied, to account for uncertainty in inter and intra-species differences. Confidence in the RfD is medium.

At this time, pendimethalin has not been evaluated by EPA/IRIS as to evidence of potential carcinogenicity.

Propargite: 2-(4-(1,1-dimethylethyl)phenoxy)cyclohexyl-2-propynyl sulfite;
CASRN 2312-35-8

Propargite is an acaricide with residual killing action, used primarily for control of spiders and mites. It is manufactured as a pesticide, under the product name, “Omite”, and various other commercial preparations.

The oral RfD for propargite is 2E-2 mg/kg/day. This is based on two co-critical studies cited in IRIS. The first study was a two year oral feeding study in dogs. At the highest tolerated dose, no observable adverse effects were evident in the dogs, and no LEL was established. From these results, it was assumed that the NOAEL from this study was equal to or greater than the highest daily dose of 22.5 mg/kg/day. From this study, an uncertainty factor of 1000 is applied. The same oral RfD—2E-2 mg/kg/day, based on reproductive endpoints--was also calculated independently in IRIS from a 1982 oral dosing reproductive study of pregnant female rabbits. Here, a NOAEL of 2 mg/kg/day was observed, and the LEL was 6 mg/kg/day. Specific toxicologic endpoints in this rabbit study were maternal and fetal toxicity. Critical toxicologic effects included reduced maternal body weight gain and reduced body weight, as well as delayed fetal ossification. Uncertainty factor for this study was 100. The use of two co-critical supporting studies for the RfD in IRIS was largely due to the irritating properties of propargite, and the gavage nature of the rabbit study, which makes it difficult to interpret conclusively the dose-related findings for the maternal and reproductive endpoints. Confidence in the RfD is medium, because of the lack of sufficient additional experimental data from chronic animal bioassays.

At this time, propargite has not been evaluated in terms of carcinogenic potential.

Triallate: 2,3,3-trichloroallyl,N,N-diisopropylthiocarbamate; CASRN 2303-17-5

Triallate is a pre-emergence selective herbicide, and is the active ingredient in the commercial product, “Far-Go”, used on a variety of wheat, barley, pea and lentil crops. The oral RfD for triallate is 1.3E-2 mg/kg/day, based on a 1970 two-year feeding study in dogs. The NOAEL from this study was 1.275 mg/kg/day, with a LOAEL of 4.25 mg/kg/day. Critical toxicologic endpoints included increased hemosiderin deposition, especially in the spleen, as well as increased serum alkaline phosphatase levels and increased liver weights, in mid-dose and high-dose females. Uncertainty factor is 100, to account for inter and intraspecies differences. Confidence in the RfD is medium.

At this time, triallate has not been evaluated for potential carcinogenicity.

Trifluralin: 4-(di-N-propylamino)-3,5-dinitro-1-trifluoromethylbenzene; CASRN 1582-09-8

Trifluralin is a selective pre-emergence herbicide, which is used on a wide variety of food crops. It is the active ingredient in the commercial product, “Treflan”.

The oral RfD for trifluralin is 7.5E-3 mg/kg/day, based on a twelve month dog feeding study, published in 1984. NOAEL from this study was 0.75 mg/kg/day, with a LEL of 3.75 mg/kg/day. Critical toxic endpoints included increased liver weights, and increase in methemoglobin. An uncertainty factor of 100 is applied to this RfD to account for inter and intra-species differences, and confidence in the RfD is high, because the critical study is judged to be of good quality. Also, there are several other studies in other species which are supportive of the RfD.

Carcinogenicity: Trifluralin is classified in IRIS in Group C (possible human) carcinogen. This

is based on the induction of tumors of the urinary tract (renal pelvis carcinomas and urinary bladder papillomas), and of the thyroid (adenomas and carcinomas) in a 1980 chronic rat bioassay. In addition, trifluralin is structurally similar to the known rat carcinogen, ethylfluralin. The oral carcinogenic slope factor for trifluralin is $7.7\text{E-}3$ mg/kg/day.

Toxaphene: CASRN 8001-35-2

Toxaphene is not a single compound, but is a mixture of various chlorinated camphenes. ATSDR indicates that toxaphene contains over 670 different individual chemicals. In 1982, EPA cancelled most of the uses of toxaphene, and in 1990, all uses of toxaphene in the USA were banned. Prior to 1982, toxaphene was one of the most heavily used insecticides in the USA. It was used primarily in the southern United States, for controlling insects on cotton and other crops. It was also commonly used as a “dip” to control insect pests on livestock, as well as to kill unwanted fish in lakes.

Toxaphene breaks down very slowly in the environment, and because of its many different ingredients, is not easy to analyze for in environmental samples. Toxaphene is broken down in the body somewhat more easily than most of the other organochlorines, and is excreted in urine and feces. However, studies in animals show that low levels of toxaphene may remain in fat for months. Remnant concentrations of toxaphene as a hazardous waste are also still important. Even as recently as 1998-99, toxaphene was strongly implicated by EPA as a major contributing factor to a massive bird die-off near a Florida lake. Although toxaphene is the major suspect, dieldrin, chlordane, DDD and DDE are among the pesticides that were detected, often in high concentrations in the soils and bird tissues. It is likely that this particular toxaphene exposure was due to illegal dumping of old stocks of pesticide.

Exposure to high levels of toxaphene has been reported to damage the lungs, nervous system, liver, and kidneys, and can cause death. The severity of effects depend on how much dose is acquired. Studies in animals show that long-term exposure to toxaphene can damage the liver, kidneys, adrenals glands and immune system, and may cause minor changes in fetal development. Because toxaphene is no longer used in this country, the chances of high-level exposure are small. However, exposure to low levels can occur in some areas because of toxaphene’s relatively significant environmental persistence.

At this time, IRIS has not developed an oral RfD for Toxaphene.

IRIS does list an oral carcinogenic slope factor of $1.1\text{E}+0$ mg/kg/day, for toxaphene. With respect to carcinogenic potential for toxaphene, IRIS lists it as a Group B2 (possible human) carcinogen.

Phenol: hydroxybenzene; CASRN 108-95-2

Phenol, also known by the common product name of carbolic acid, is a chemical which is

produced and utilized in many manufacturing processes and products. Phenol is extensively manufactured and used as a chemical intermediate, in the production of phenolic resins, nylon and other synthetic fibers, and epoxy resins.

Phenol also occurs naturally in the environment, in various living organisms. In humans, it is produced in small quantities and excreted independent of external exposure to the compound. It is thus commonly found in the urine of children and adults. The normal range of phenol in the urine of unexposed individuals is 0.5 to 80 milligrams of phenol per liter (mg/L, or ppm) of urine. It is also found in nature in some foods, and in human and animal wastes and decomposing organic matter. Phenol is also present in many consumer products like ointments, ear and nose drops, cold sore lotions, mouthwashes, throat lozenges and antiseptic lotions. It has been found in drinking water, as well as foods like summer sausage, fried chicken, cheese, and some species of fish. The natural presence of phenols in food and drug metabolites (e.g., phenol is a by-product of salicylate metabolism) limits biological monitoring in people.

Phenol acts toxicologically as a general protoplasmic poison that denatures proteins and produces chemical burns characterized by a whitish or brownish area, especially on mucosal surfaces. Even though a 10 per cent solution can cause chemical burns, local effects tend to be more mild than those of strong acids or bases. Severe phenol exposures can result in seizures, respiratory arrest, heart arrhythmias, and metabolic acidosis. The lethal oral dose in humans is 10-30 grams, although fatalities have occurred after ingestions of as little as 4.8 grams. The consumption of 0.6 grams has produced no symptoms. Phenol is absorbed rapidly through the lungs and skin. Children have died after the application of 5 per cent phenol compresses to the skin. Most absorbed phenol is biotransformed by the liver to various conjugated metabolites, which are rapidly excreted by the kidney. Elimination is nearly complete within 24 hours.

The oral RfD for phenol is 6E-01, with an uncertainty factor of 100. Critical toxicologic endpoint was reduced fetal body weight in rats, with a NOAEL of 60 mg/kg/day, and a LOAEL of 120 mg/kg/day. An uncertainty factor of 100 is applied to the RfD, which includes 10 for interspecies extrapolation and 10 to account for sensitive human populations. Confidence in the RfD is low.

In terms of classification as to possible human carcinogenicity, EPA has assigned phenol a weight-of-evidence classification of Group D (not classifiable as to human carcinogenicity). This is based on the absence of any human carcinogenicity data, and inadequate cancer data in animal studies. Although some older studies indicate that phenol may be a promoter and/or weak skin carcinogen in specially inbred sensitive mouse strains, NCI concluded in a 2-year carcinogenicity bioassay of mice and rats that under the study conditions, phenol was not carcinogenic in either rodent species.

CHLOROPHENOLS:

The chlorophenols are a group of chemicals in which between one (mono-chloro) and five (penta-chloro) chlorine molecules have been added to a molecule of phenol. In all, there are 19

different chlorophenols. Six of these will be considered in this report.

Many of the various chlorophenols either have been used directly as pesticides, or have been converted into pesticides. Also chlorophenols, especially 4-chlorophenol, have been used as antiseptics. In addition to their commercial production, small amounts of some chlorophenols—especially the mono and dichlorophenols—when drinking water or waste water containing certain organic materials is disinfected with chlorine. Chlorophenols are also produced in the production of paper; i.e., when chlorine is used to bleach wood pulp.

Most chlorophenols released in the environment go into water, with relatively low quantities entering the air. Chlorophenols will photodegrade. In water, chlorophenols tend to adsorb to sediment. They can and do enter the aquatic food web, but—depending on the degree of chlorination—are normally broken down by microorganisms, with a persistence in the environment ranging from a few days to several weeks. Higher chlorinated species like penta and tetrachlorophenol are an exception to this pattern, and can sometimes persist for longer periods, depending on the specific conditions at hand.

2-Chlorophenol: 2-chloro-1-hydroxybenzene; CASRN 95-57-8

All of the monochlorophenols have been used as biocides of one fashion or another, at various times in the past. The monochlorophenols have also been used as antiseptics, although in this role they have been largely replaced by other chemicals. The most common use of the monochlorophenols has been as chemical intermediates in the production of higher chlorinated phenols.

The oral RfD for 2-chlorophenol is 5×10^{-3} mg/kg/day, with reproductive effects in the orally dosed rat as the critical toxicological endpoint. The NOAEL from these studies was 5 mg/kg/day, and the LOAEL was 50 mg/kg/day. Confidence in the RfD is low, with an uncertainty factor of 1000.

At this time, EPA has not evaluated 2-chlorophenol as to likelihood of carcinogenicity.

4-Chlor-3-methylphenol: 4-chloro-3-methyl-1-hydroxybenzene; CASRN 59-50-7

At this time, EPA has not established an RfD for this chemical, nor has it evaluated it as to likelihood of carcinogenicity.

2,4-Dichlorophenol (2,4-DCP): 2,4-dichloro-1-hydroxybenzene; CASRN 120-83-2

2,4-dichlorophenol has had pesticidal uses at various times in the past, as a miticide and for mothproofing. One of the most extensive uses of 2,4-DCP has been as a chemical intermediate, in the production of the herbicide 2,4-dichlorophenoxyacetic acid (2,4-D). 2,4-D herbicide remains one of the most commonly used pesticides in the world, and is still extensively utilized in the U.S.

In sufficiently high doses, 2,4-dichlorophenol can cause toxicity to the liver and central nervous system (CNS). The oral RfD for 2,4-dichlorophenol is $3\text{E-}3$ mg/kg/day, based on a decrease in the delayed hypersensitivity response in the orally dosed rat. NOAEL for this endpoint was 0.3 mg/kg/day, with a LOAEL of 3.0 mg/kg/day. Confidence in the RfD is low, with an uncertainty factor of 100.

At this time, 2,4-dichlorophenol has not been fully evaluated by EPA for possible carcinogenicity.

2,4-Dimethylphenol: 2,4-dimethyl-1-hydroxybenzene; CASRN 105-67-9

The oral RfD for 2,4-dimethylphenol is listed in IRIS as $2\text{E-}2$ mg/kg/day. This is based on a subchronic (90 day) oral gavage study in the mouse. Critical toxic endpoints were hematological changes, and clinical signs of ataxia, lethargy and prostration in the animals. NOAEL from this study was 50 mg/kg/day, and the LOAEL was 250 mg/kg/day. Confidence in the RfD is low, with an uncertainty factor of 3000. This reflects a factor of 10 each for inter and intraspecies variability, and an additional factor of 30 for lack of chronic data in a second species, and inadequate information about reproductive/developmental studies.

At this time, neither IRIS has not evaluated this chemical as to carcinogenicity.

2,4,5-Trichlorophenol (2,3,4-TCP): 2,4,5-trichloro-1-hydroxybenzene; CASRN 95-95-4

The largest use for (2,4,5-TCP) has been as a chemical intermediate in the production of the herbicide 2,4,5-trichlorophenoxyacetic acid (2,4,5-T). However, because 2,4,5-T is also frequently contaminated with trace amounts of dioxin(s) as an unintentional by-product resulting from the manufacturing process, 2,4,5-T was taken off the market in the USA in 1985.

The oral RfD for 2,4,5-trichlorophenol is $1\text{E-}1$ mg/kg/day, based on critical endpoint effects of liver and kidney pathology in orally dosed rats. NOAEL from this study was 100 mg/kg/day, with a LOAEL of 300 mg/kg/day. Confidence in the RfD is low, with an uncertainty factor of 1000.

At this time, EPA has not evaluated 2,4,5-trichlorophenol for possible carcinogenicity.

2,4,6-Trichlorophenol (2,4,6-TCP): 2,4,6-trichloro-1-hydroxybenzene; CASRN 88-06-2

2,4,6-TCP and the tetrachlorophenols have been used directly as pesticides, in the preservation of wood. But more commonly, 2,4,6-TCP has been used as a chemical intermediate in the production of higher chlorinated phenols; especially 2,3,4,6-tetrachlorophenol, and pentachlorophenol.

At this time, IRIS has not developed a specific RfD for this compound.

IRIS does list 2,4,6-trichlorophenol as a Group B2 (possible human) carcinogen. This is based on increased incidence of lymphomas or leukemias in male rats, and hepatocellular adenomas or carcinomas in male and female mice. The carcinogenic oral slope factor for 2,4,6-trichlorophenol is 1.1E-2.

2,3,4,6-Tetrachlorophenol: 2,3,4,6-tetrachloro-1-hydroxybenzene; CASRN 58-90-2

Although tetrachlorophenol has been marketed and used in the past as a fungicide, its primary source today is most likely as a biodegradation product of pentachlorophenol (PCP). It has been measured in low quantities in various environmental media and foodstuffs, as well as human tissue. However, limited data do indicate that environmental biodegradation of 2,3,4,5-tetrachlorophenol may occur both aerobically and anaerobically. The most important human exposure scenario for this chemical would likely be occupational exposure, which might occur via dermal or inhalation pathways at workplaces like pulp or paper mills, or sawmills where PCP is used. The available data lists a modeled bioconcentration factor (BCF) of 930 for this compound, which suggests that the potential for bioconcentration in aquatic organisms is high.

The toxic mechanism(s) of action for this compound are similar to those of the closely-related PCP (see PCP), and involve the inhibition of critical oxidative phosphorylation pathways within cells of a wide variety of organisms. Like other chlorophenols, it can affect several organ systems, especially the liver. Occupational exposures to tetrachlorophenol dust has been found to be irritating to the nose and throat of exposed workers.

The oral RfD for this chemical is 3E-2mg/kg/day, based on a 1986 oral subchronic study in rats. Critical toxicologic target endpoint was the liver, which showed centrilobular hypertrophy and increased weight. NOAEL for this study was 25 mg/kg/day, with a LOAEL of 100 mg/kg/day. An uncertainty factor of 1000 is applied to this RfD. This includes subfactors of 10 each, to account for interspecies and intraspecies variability, and for extrapolating a subchronic effect to its equivalent chronic level. Confidence in the RfD is medium.

At this time, 2,3,4,6-tetrachlorophenol has not been evaluated by EPA in terms of likelihood of carcinogenicity.

Pentachlorophenol (PCP): CASRN 87-86-5

PCP is the most commonly used chlorinated phenol, with a long history of use in the USA as a wood preservative, fungicide, and bactericidal agent. Degradation of PCP in the environment can also result in the formation of other closely related pollutants discussed in this report; the most important of which are 2,3,4,5-tetrachlorophenol and pentachloroanisole, as well as pentachloroguaiacol. In recent years, most of the uses of PCP have been restricted, because of the tendency for PCP to be contaminated with trace quantities of higher chlorinated dioxins, as a

result of the manufacturing process.

PCP exerts its primary mechanism of toxic action by inhibiting a very general, and essential cellular mechanism known as oxidative phosphorylation. A wide range of phyla share this common biochemical pathway. For this reason, it has been used as an effective “pesticide” to control many different forms of life—from the very simple to the very complex. In both humans and animals, significant exposure to PCP, can harm the liver, kidneys, blood, lungs, nervous system, immune system, and gastrointestinal tract. Impurities are also present in PCP.

These can include various of the higher chlorinated dibenzo-para-dioxins, which in the historic sense, were unintentionally produced in varying quantities along with the PCP. Depending on the concentrations and the exposure circumstances, such impurities in PCP may contribute to some of its harmful effects.

PCP is metabolized by the body relatively quickly, and thus does not tend to bioaccumulate in the fashion of more lipophilic compounds like DDT or PCBs. PCP adsorbs to soils and sediments, but can be broken down by microorganisms, to form other compounds in the environment. It is also degraded by sunlight in air and surface waters. PCP is known to be present in fish, but tissue levels are usually low because it can be metabolized and excreted by these and most other vertebrates.

The Oral RfD for pentachlorophenol is listed in IRIS as 3E-2 mg/kg/day.

This is based on a rat oral chronic feeding study, with liver and kidney pathology as the critical toxic endpoints. NOAEL from this study was 3 mg/kg/day, with a LOAEL of 10 mg/kg/day. Confidence in the RfD is medium, with an uncertainty factor of 100.

EPA (IRIS) also lists pentachlorophenol as a Class B2 (possible human) carcinogen. This is based on statistically significant increases in the incidence of multiple biologically significant tumor types in mice. Histologically, these tumors included hepatocellular adenoma/carcinoma, pheochromocytoma/malignant pheochromocytoma, and hemangiosarcoma/hemangioma. The existing human database on PCP is inadequate, and largely uninformative, in terms of further clarifying the likelihood of potential human carcinogenicity of PCP.

The oral carcinogenic slope factor for pentachlorophenol is 1.2E-1.

Pentachloroanisole: pentachloromethoxybenzene; CASRN 1825-21-4

Pentachloroanisole is not produced commercially. The most probable environmental source of this material in the environment is from the microbial biotransformation (methylation) of the commonly used pesticide/biocide, pentachlorophenol (PCP). PCP can be methylated to the corresponding anisole, in such media as soil, sediment, or wood chips. TOXNET bibliographic sources indicate that pentachloroanisole is also capable of being biotransformed back into PCP. The literature also indicates that anaerobic environments favor PCP, while aerobic environments

favor pentachloroanisole.

People are exposed to pentachloroanisole primarily via food—especially oils and fats, and ambient air. While not evident in FDA's Total Diet Studies, dietary exposure may occur from eating contaminated fish and fish products like fish liver oil. Other exposure may occur via skin contact with soil or wood products which have been treated with PCP. Pentachloroanisole has been detected in pine needles, presumably because of its prevalence as an air pollutant in areas which use much PCP. In Sweden, pine needles have been used as a monitoring tool to establish past use patterns of PCP.

In the general sense, the toxicity and mechanism(s) of action(s) of pentachloroanisole are similar to those of its parent chemical, PCP (see section on PCP). However, methylation of the chlorophenols makes them more polar, and less reactive in biological systems. Thus the extent of both acute and chronic toxicity of pentachloroanisole can be reasonably anticipated to be somewhat less than its chlorinated parent, PCP.

At this time, EPA has not developed an RfD for pentachloroanisole.

The toxicological literature indicates that several studies have been conducted with rodents, as to pentachloroanisole's possible carcinogenicity and/or mutagenicity. However, the available animal cancer data are somewhat equivocal, and have not been fully evaluated by EPA. At this time, EPA has thus not developed a weight-of-evidence classification, in terms of evaluating likely carcinogenicity of this chemical, nor has it developed a carcinogenic slope factor for pentachloroanisole.

CHLORINATED GUAIACOLS: ortho-methoxy-chlorophenols

Guaicol is ortho-methoxy phenol. Guaicol *per se*, appears to be somewhat less toxic and corrosive as phenol, and has pharmacological properties quite similar to those of phenol. Chlorinated guaicols are thus closely related structurally to the chlorinated phenol group of chemicals. The environmental presence of residues of the various chlorinated guaicols is commonly associated with pulp and paper mills which utilize chlorine in the paper bleaching process.

The toxicology of the chlorinated guaicols is likewise similar to that of the chlorinated phenols; i.e higher chlorinated guaicols uncouple oxidative phosphorylation in mitochondria. In terms of their cellular toxicity and mode of action, they thus tend in a very general sense, to resemble pentachlorophenol. Chlorinated guaicols also appear to be metabolized in the body by the same degradation pathway as pentachlorophenol.

Detailed and specific toxicity data for many of the chlorinated guaicols are not available in the literature at this time. Likewise, at this time none of the chlorinated guaicols have been evaluated by EPA in terms of either developing specific RfDs for toxicity, or evaluating their

likelihood of carcinogenicity.

4-Chloroguaiacol: 4-chloro-2-methoxy-phenol; CASRN 16766-30-6

3,4-Dichloroguaiacol: 3,4-dichloro-2-methoxy-phenol; CASRN 77102-94-4

4,5-Dichloroguaiacol: 4,5-dichloro-2-methoxy-phenol; CASRN 2460-49-3

4,6-Dichloroguaiacol: 4,6-dichloro-2-methoxy-phenol; CASRN 16766-31-7

3,4,5-Trichloroguaiacol: 3,4,5-trichloro-2-methoxy-phenol; CASRN 57057-83-7

3,4,6-Trichloroguaiacol: 3,4,6-trichloro-2-methoxy-phenol; CASRN 60712-44-9

4,5,6-Trichloroguaiacol: 4,5,6-trichloro-2-methoxy-phenol; CASRN 2668-24-8

Tetrachloroguaiacol: 3,4,5,6-tetrachloro-2-methoxy-phenol; CASRN 2539-17-5

This guaiacol is the most common chlorinated phenolic compound associated with the process of chlorine bleaching of wood pulp.

Retene: 1-methyl-7-isopropyl phenanthrene; CASRN 483-65-8

Retene is a compound commonly noted in aquatic environments as a waste product from wood pulp and paper processing. It is found in pine tar, and is also formed from the dehydrogenation of the structurally-related resin acid, abietic acid. Resin acids such as these are major toxicants found in most pulp and paper effluents, especially kraft pulp mill effluents. (See also Chlorinated Guaiacols).

Relatively little information exists as to the toxicity of retene to humans and animals. At this time, EPA has not evaluated retene in terms of deriving a RfD for non-cancer endpoints.

Likewise, EPA has not evaluated retene in terms of potential carcinogenicity.

POLYBROMINATED DIPHENYL ETHERS (PBDEs):

PBDEs have been used as flame retardants in a wide variety of consumer products. Their use has also significantly increased in various of the more modern electronic items, chiefly in electronic boards used in computers, television sets and radios. According to the World Health Organization (1994), PBDEs are used primarily in two kinds of formulations. These are the deca-bromodiphenylether (10 bromines on the molecule), and the product known as Bromkal 705DE, which is a mixture of the hexa, penta, and tetra-bromodiphenyl isomers.

The PBDEs are relatively “new” environmental contaminants, first documented as environmental residues in 1981, in Swedish samples of sea trout, pike, and eel. Since these findings, many other studies have confirmed their presence in various media, including sediment, sewage sludge, birds and bird eggs, and marine mammals. It is likely that food is the main exposure route for these compounds in humans, in which recent data indicate that lower brominated congeners appear to be the most abundant variety of the PBDEs sequestered. Depending on the sampling site and the type of species or media sampled, reported concentrations in the environment have ranged from 8-110,000 micrograms per kilogram.

At this time, the only RfD available for any of the PBDEs is for the decabromodiphenyl ether (aka “decabromodiphenyl *oxide*, decabromobiphenyl ether, decabromobiphenyl *oxide*, Bromkal 83-10DE, Bromkal 82-ODE”, etc., CASRN 1163-19-5). Laboratory analysis for residues of decabromodiphenyl ether was not attempted in this report. However, IRIS lists an oral RfD of 1E-2 for this compound, based on a rat oral bioassay study published in different segments in 1973 and 1975. Chronic dosing at 1.0 mg/kg/day, the highest dose given over the full 2 year period--revealed no observable chronic toxic endpoints. This dose was adopted as the chronic NOAEL, with no chronic LAOEL being derivable from the 2-year data at hand. This same study also included a subset of separate oral dosing data from a 30 day time interval, using much higher daily doses. From this portion of the experiment, a short term to sub-chronic NOAEL of 8 mg/kg/day was derived, with the toxic endpoint of liver enlargement in the dosed animals. The sub-chronic LOAEL was 80 mg/kg/day. This subchronic NOAEL is close to the chronic NOAEL of 1.0 mg/kg/day when adjusted by a factor of 10 to account for the uncertainty in extrapolating subchronic dose to chronic dose. A uncertainty factor is applied to the chronic NOAEL to account for intra-and interspecies variability. Confidence in the oral RfD is medium.

Likewise at this time, the only PBDE species which has been evaluated by EPA/IRIS for carcinogenicity is decabromodiphenyl ether. EPA/IRIS has classified decabromodiphenyl ether in Group C (possible human carcinogen). This is based on no human data, and limited evidence of animal carcinogenicity. The animal data include significantly increased incidences of neoplastic liver nodules in male and female rats, and increased incidences of hepatocellular adenomas or carcinomas (combined) in male mice.

At this time, no oral carcinogenic slope factor has been developed by EPA for

decabromodiphenyl ether, nor have the various other PBDEs relevant to this report been evaluated by IRIS or EPA in terms of possible carcinogenicity.

Hexabromodiphenylether: CASRN 36483-60-0

In the present study, a total of 25 different fish samples, spanning 5 species, showed positive results for this compound. However, all of these positive individual analytical findings were accompanied by a “J” data qualifier (See QA Section). This means that the analyte was analyzed for and was positively identified, but (for various reasons, chief among which are the very low level of detection being sought, the relative degree of efficiency of the laboratory analytic techniques, etc.) the associated numerical value(s) may not be consistent with the amount actually present in the environmental sample.

At this time, no RfD has been developed for hexabromodiphenylether, nor has it been evaluated by IRIS or EPA in terms of possible carcinogenicity.

Pentabromodiphenylether: Bromkal 70; CASRN 60371-14-4

In the present study, a total of 45 different fish samples, spanning 6 species, showed positive results for this compound. However, all of these positive individual analytical results were accompanied by a “J” data qualifier (see QA Section). This means that the analyte was analyzed for and was positively identified. However, for various reasons, chief among which are the very low levels of detection being sought, the relative degree of efficiency of the analytical method, etc., the associated numerical value(s) may not be consistent with the amount actually present in the environmental sample in question.

At this time, no RfD has been developed for pentabromodiphenylether, nor has it been evaluated by IRIS or EPA for possible carcinogenicity.

Tetrabromodiphenylether: CASRN 40088-47-9

In the present study, a total of 55 fish samples, spanning 5 species, showed positive results for this compound. However, all of these positive individual analytical results were accompanied by a “J” data qualifier (See QA Section). This means that the analyte was analyzed for, and was positively identified. However, for various reasons—chief among which are the very low levels of detection being sought, the relative degree of efficiency of the analytical method, etc—the associated numerical values may not be consistent with the amount actually present in the environmental sample in question.

At this time, no RfD has been developed for tetrabromodiphenylether, nor has it been evaluated by IRIS/EPA for possible carcinogenicity.

MISCELLANEOUS OTHER ETHERS

4-Bromophenyl-phenylether: p-bromodiphenyl ether; CASRN 101-55-3

This chemical is not produced commercially in the USA, but has been detected in surface water, as well as in occasional finished samples of drinking water. The environmental sources of 4-bromophenyl phenyl ether are not clearly known at this time, but are thought to arise primarily from the chlorination treatment of sewage and drinking water. For example diphenyl oxide, a probable precursor to this chemical, can be released to various chlorination operations through its use as a common dye vehicle and as a heat exchange fluid; thus formation of 4-bromophenyl phenylether from this released diphenyl oxide may be a possibility.

4-bromophenyl phenylether has also been used in the past in various polymer materials, as a flame-retardant additive.

At this time, EPA has not developed a RfD for this chemical.

In terms of the likelihood of this chemical being a carcinogen, EPA has given 4-bromophenyl-phenylether a classification of Group D (not classifiable as to human carcinogenicity), due to the lack of human data, and the absence of adequate animal data. No long-term animal studies of carcinogenicity are available.

4-Chlorophenyl-phenylether: p-chlorodiphenyl ether; CASRN 7005-72-3

4-chlorophenyl phenylether is a man-made compound, and is not known to exist in nature. It is manufactured and used as a dielectric fluid, to replace PCBs, and is used primarily in electrical capacitors. Probable routes of human exposure to this compound would be via inhalation and/or dermal contact, as a result of such manufacture, formulation, or use. Environmental release may likewise occur during production, use, or disposal.

The environmental persistence of 4-chlorophenyl phenylether is much less than that of its PCB predecessor compounds. The estimated atmospheric half-life is about 2.3 days, and the half-life with respect to biodegradation in activated sludge is approximately 4 hours. It is not considered to be a compound with high bioaccumulation potential, nor does the literature of which we are aware indicate that it has been detected in fish.

At this time, EPA has not established a RfD for 4-chlorophenyl phenylether.

As to the likelihood for potential carcinogenicity of this chemical, EPA has at this time not evaluated 4-chlorophenyl phenyl ether, in terms of carcinogenic weight-of-evidence, or other related factors.

bis(2-Chloroisopropyl)ether: CASRN 39638-32-9

This chemical has been occasionally detected in surface water and drinking water samples. It is not predicted to persist for long periods in environmental media. The TOXNET database indicates that the half life via volatilization for this chemical in a given water body is calculated at 1.37 days.

The RfD for this compound is listed in IRIS at 4E-2 mg/kg/day. This is based on a 2 year dietary exposure study in mice, with critical endpoints being noted on the hemopoetic system (hemoglobin decrease and possible destruction of red blood cells). NOAEL for this study was 35.8 mg/kg/day, with a LOAEL of 198 mg/kg/day. Confidence in the RfD is low, with an uncertainty factor of 1000 to account for both interspecies (factor of 10) and interhuman (factor of 10) variability in the absence of sufficient animal data (no second animal species, etc.) An additional tenfold uncertainty factor was also added, due to data gaps in the evaluative studies which are available for this chemical.

EPA/IRIS has not at this time evaluated bis(2-chloroisopropyl) ether, in terms of weight-of-evidence for possible carcinogenicity. However, HEAST lists it as a Group C (possible human) Carcinogen, with an oral carcinogenic slope factor of 7E-2 mg/kg/day. This is based on liver and lung tumors in rodents.

Hexachlorobutadiene: (HCBd), 1,1,2,3,4,4-Hexachloro-1,3-butadiene; CASRN 87-68-3

Hexachlorobutadiene is a man-made chemical generally present as a liquid at typical temperatures encountered in the environment. Hexachlorobutadiene is used as an intermediate in the manufacture of other chemicals (e.g., rubber compounds), as a hydraulic and heat transfer fluid and in gyroscopes (ATSDR, 1994). There is very little information on the potential mobility of hexachlorobutadiene in environmental media. The compound may accumulate in aquatic organisms living in affected surface waters. Exposure to this chemical may be determined by evaluating urine and blood for hexachlorobutadiene metabolites. However, due to the rapid metabolism and elimination of this compound, this will only provide an indication of very recent exposures. It may also be valuable to conduct kidney function tests to determine if exposure has resulted in impaired kidney function.

Human data on the health effects of hexachlorobutadiene exposure are extremely limited and existing studies are complicated by simultaneous exposures to other solvents. Data from studies in laboratory animals therefore provides most of what we know about hexachlorobutadiene toxicity. Hexachlorobutadiene has been shown to be absorbed after oral exposure in experimental animals, although the degree of absorption has not been clearly defined. Oral exposure to this chemical may lead to kidney damage in experimental animals and the kidney appears to be the primary target organ for toxicity. Some effects were also observed in the liver but these occurred at higher concentrations relative to the kidney effects (ATSDR, 1994). Similarly, hexachlorobutadiene exposure did result in developmental effects in experimental animals (decreased pup weights) but the toxic effect levels were above those reported to cause effects in the kidney.

Non-Cancer Health Risks: The oral RfD for Hexachlorobutadiene is listed in HEAST, as 2E-4 mg/kg/day, based on an oral 13-week study in mice. LOAEL was 0.5 mg/kg/day, and the critical toxic endpoint was renal tubule regeneration. IRIS has withdrawn its oral RfD (in May, 1993) for hexachlorobutadiene, and indicates that a new RfD summary is in preparation. The ATSDR has established a Minimum Risk Level (MRL) of 0.0002 mg/kg/day, for intermediate duration

exposures. This was derived from a finding of kidney degeneration in female mice at a dose level of 0.2 mg/kg/day for 13 weeks (NTP, 1991). This finding was supported by other studies showing similar findings at higher doses (e.g., 2 mg/kg) in both rats and mice.

Carcinogenesis: There is only limited evidence regarding the possible carcinogenicity of hexachlorobutadiene but this evidence suggests the chemical is a possible human carcinogen. IRIS lists hexachlorobutadiene in Class C (possible human carcinogen). This is based on a two year rat study, in which findings of renal tubular adenomas and carcinomas were noted in 18 per cent of the high-dosed females, with high dose males exhibiting significant mortality before the study was concluded. There was no significant increase in neoplasia at other tissue sites. There are currently no human studies on hexachlorobutadiene carcinogenicity. A single study (Kociba, 1977) indicated that hexachlorobutadiene caused increased kidney tumors in female rats. Increased tumor incidence was only observed in the high dose group, 20 mg/kg/day. The derived oral slope factor for HCBT is listed in IRIS at 7.8E-2 mg/kg/day.

References

1. ATSDR (Agency for Toxic Substances and Disease Registry). 1994. Toxicological Profile for Hexachlorobutadiene TP-93/08
2. Kociba, R.J., D.G. Keyes, G.C. Jersey, et al. 1977. Results of a two-year chronic toxicity study with hexachlorobutadiene in rats. *Am. Ind. Hyg. Assoc. J.* 38: 589-602.

Hexachloroethane: perchloroethane; 1,1,1,2,2,2-hexachloroethane; CASRN 67-72-1

Hexachloroethane is a man-made chemical also known as perchloroethane, carbon hexachloride or HCE. Hexachloroethane may be present as an ingredient in certain pesticides, plastics, lubricants, cellulose and smoke producing devices. It is also used in the process of aluminum smelting. Hexachloroethane may be present in soil, water or air and may move readily between environmental media. Hexachloroethane has only a limited potential to accumulate in fish tissues since it is metabolized and eliminated quickly (ATSDR, 2000). Because of its rapid metabolism and elimination, monitoring for exposure to this chemical may be difficult.

The degree to which hexachloroethane is absorbed in the GI tract will vary with the composition of the material being ingested. Absorption values derived from animal studies have ranged from 19% (in rabbits) to 88% (in mice). Hexachloroethane distributes to most tissues and is eliminated fairly rapidly with a half life less than three days in rats (ATSDR, 2000).

Hexachloroethane is excreted via urine, feces and exhaled air. Adverse effects of hexachloroethane exposure include liver toxicity and irritation of the eyes, nose and lungs after inhalation exposure. There is very limited data on the toxicity of hexachloroethane in humans, most knowledge comes from studies in experimental animals. Hexachloroethane has not been reported to cause developmental effects in either humans or animals, although the number of studies examining this endpoint is limited.

Non-Cancer Health Risks: IRIS lists an oral RfD of 1E-3 mg/kg/day, for hexachloroethane. This is based on a subchronic dietary study in the rat (Gorzinski et al, 1985), in which male rats

exhibited renal lesions consisting of atrophy and degeneration of the renal tubules. NOAEL for this study was 1 mg/kg/day, with a LOAEL of 15 mg/kg/day. These findings were supported by several additional studies (IRIS, 2000). Confidence in the RfD is medium, with a uncertainty factor of 1000 (10 for interspecies extrapolation, 10 for possible human sensitivity and 10 for the use of a subchronic study).

Developmental and reproductive effects have also been observed for hexachloroethane but these were observed only at concentrations (e.g., 500 mg/kg) higher than the kidney effects used to determine the RfD (IRIS, 2000). The level of confidence ascribed to the RfD is described as medium due to the limited number of animals and limited time duration of the Gorzinski et al study.

Carcinogenesis: There is only limited evidence regarding the possible carcinogenicity of hexachloroethane. There are currently no human studies on hexachloroethane carcinogenicity. For classification as to evidence of potential carcinogenicity, IRIS has placed hexachloroethane in Group C (possible human carcinogen). This is based on an oral dosing study (NCI, 1978) which indicated that hexachloroethane caused increased liver tumors in mice, but not in rats. Mice of both sexes showed significant increase in hepatocellular carcinoma. The doses in these studies were high, 200-400 mg/kg/day in rats and 600-1200 mg/kg/day in mice. The derived oral slope factor is listed in IRIS at 1.4E-2 mg/kg/day.

References

1. ATSDR (Agency for Toxic Substances and Disease Registry). 1996. Toxicological Profile for Hexachloroethane
2. Gorzinski, S.J., R.J. Nolan, S.B. McCollister, R.J. Kociba and J.L. Mattsson. 1985. Subchronic oral toxicity, tissue distribution and clearance of hexachloroethane in the rat. *Drug Chem. Toxicol.* 8(3): 155-169.
3. NCI (National Cancer Institute). 1978. Bioassay of Hexachloroethane for Possible Carcinogenicity. CAS No. 67-72-1. NCI-CG-TR-68. Tech. Report Ser. No. 68. U.S. DHEW. Publ. No. (NIH) 78-1318.

POLYCHLORINATED BIPHENYLS (PCBs):

PCBS are a group of synthetic organic chemicals that contain 209 individual chlorinated biphenyl compounds (known as PCB congeners). There are no known natural sources of PCBs in the environment. Their chemical structures—which often contain numerous chlorine atoms at various critical sites on the biphenyl ring, are difficult to thermally degrade, unless high temperatures are involved. PCBs do not conduct electricity, and most of the various types of PCBs and PCB mixtures take the form of liquids. For these reasons, PCBs have been used extensively in much of the world as electrical insulating fluids, especially in capacitors and transformers which deliver high voltage in critical devices and situations where fire prevention is of great concern. PCBs have also been used extensively as hydraulic fluids, as well as in the manufacture of carbonless copy paper, etc.

Unfortunately, such industrially useful chemical and physical properties also means that PCBs are extremely persistent and difficult to degrade in the environment. PCBs enter the environment as mixtures containing a variety of individual components (congeners) and impurities that vary in toxicity. The chlorinated nature of the various PCB molecules also makes them more fat soluble, and thus capable of bioaccumulating upward in various food webs, especially in aquatic environments. Such chlorination of the PCB molecules also makes it quite difficult for organisms to degrade and excrete them by usual biochemical pathways. The historic dumping, and leakage, of PCB waste oils over the past few decades has made them major environmental contaminants on a global scale. The manufacture, processing and distribution in commerce of PCBs in the United States was restricted beginning in October 1977, because of these harmful effects on the environment.

Commercially available PCB mixtures are known in the United States by their industrial trade name, "Arochlor". Each Arochlor mixture is further identifiable by a specific number; i.e., "Arochlor 1242". The "12" portion of this designation refers to the fact that the molecule contains 12 carbon atoms (bound together in two six-sided phenyl rings; e.g., a "biphenyl"). The "42" portion refers to the per cent of chlorination in the mixture. In terms of analytical laboratory capabilities, up until the 1990's most PCB residues in the environment were usually analyzed and expressed in terms of the various "arochlors"—such as 1242, 1254, 1260-etc, rather than as the specific PCB congeners.

Congener analysis is a more intensive, and expensive process, and has only been developed relatively recently. However, congener analysis provides the most information about risk, because this type of analysis allows one to know the specific structural characteristic of the individual PCB molecule(s) detected, and how closely they may or may not biologically mimic the cellular activity of TCDD dioxin, which is the toxicological benchmark used in predicting the extent and severity of PCB congeners as they might affect living organisms.

Toxicity: Despite this wide spectrum of non-degradability, environmentally undesirable properties, and highly sophisticated risk assessment models for specific dioxin-like PCB congeners, unless relatively high doses are involved, PCB acute toxicity is usually low to moderate with few clinically observable symptoms. However, chronic toxicity is extremely important, because many specific PCB congeners—due to their co-planar shape and specific configuration(s) of chlorine atoms—are capable of interacting with cellular receptors in the same fashion as "dioxin". (See subsequent discussion section on PCB congeners; see also Dioxins and Furans). Mechanistic studies have recently identified several PCB congeners which demonstrate significant dioxin-like activity, and thus might promote tumors by different modes of action. (See profiles for specific PCB congeners, and for Chlorinated Dibenzodioxins, and for Chlorinated Dibenzofurans). PCB congeners which are not co-planar are also toxic, but exert their effects via a different cellular mechanism.

Carcinogenicity: PCB arochlors—like most other environmental toxicants—are assessed for potential cancer risk by means of their individual carcinogenic slope factors. The specific and

chemically unique PCB congeners, on the other hand, lack individual slope factors, *per se*. Rather, PCB congeners are assessed for cancer potential on the basis of how closely their individual structure(s) resemble the co-planar structure and specificity of chlorination of the closely related dioxin molecule, 2,3,7,8-Tetrachlorodibenzo-p-dioxin. (See also discussions of carcinogenicity assessment, for specific PCB arochlors and congeners and for chlorinated dioxins and furans).

Environmental alteration of PCBs; toxicological significance: With respect to the various mixtures of persistent and bioaccumulative PCB arochlors and congeners, it is important to remember that once in the environment, they are altered over time by various physical and biological processes of partitioning, chemical transformation and preferential bioaccumulation. Such processes in the environment can thus considerably alter the toxicity of the original PCB mixture, by either increasing or decreasing potency due to changes in the shape, and/or extent of chlorine substitution of the biphenyl rings.

Environmental partitioning can cause different portions of a PCB mixture to be encountered through various exposure pathways; *i.e.*, the fraction of the original PCB mixture which adsorbs to sediment or soil tends to be higher in chlorine content than the original mixture. It also tends to be more difficult for organisms to biotransform and eliminate by metabolic processes. Such PCB fractions would thus be higher in persistence, and possibly toxicity as well. Consequently, ingesting PCB-contaminated sediment or soil, or inhaling contaminated dust could theoretically pose a somewhat higher risk (than for example, ingesting PCB contaminated drinking water or breathing ambient air). This is because the PCB mixture fraction which dissolves in water or evaporates into air in the environment tends to be lower in chlorine content and persistence, and thus would likely pose lower risk upon inhalation of evaporated congeners, or ingesting water soluble congeners from the original mixture.

Not surprisingly, bioaccumulated PCBs are of the greatest concern because they appear in general to be more toxic than commercial PCBs and more persistent in the body. Accordingly, current techniques in assessing risk from PCBs utilize toxicity studies of commercial mixtures to develop a range of cancer potency estimates, and then consider the effects of environmental processes to choose appropriate risk values for representative classes of environmental PCB mixtures.

“Endocrine Disruption”: In addition to considerations of their various frank toxicologic endpoints and potential carcinogenicity, PCBs have also been investigated during recent years as potential endocrine disruptors. (EPA has defined an endocrine disruptor as “an exogenous agent that interferes with the synthesis, secretion, transport, binding, action, or elimination of natural hormones in the body that are responsible for the maintenance of homeostasis, development, and/or behavior”. There is at present much scientific debate as to whether environmental chemicals acting via such endocrine disruptor mechanisms are responsible for adverse health effects in humans. Because humans have intrinsic physiologic feedback mechanisms to control the fluctuations of hormone levels, exposures to chemicals at the levels found in the environment may be insufficient to disrupt endocrine homeostasis. Current screening assays which measure hormone receptor binding thus may or may not be associated with an actual or observable

corresponding adverse health effect. Moreover, exposures to potential environmental endocrine disruptors are minimal, compared to exposures to potential endocrine disruptors which occur naturally in food. However, it is also possible that infants and children are more sensitive to potential endocrine disruptor effects during sensitive periods of development.

PCB Arochlors: As outlined previously in this discussion, PCB Arochlors are mixtures of chlorinated congeners, with the last two digits indicating the percentage of chlorine in the compound (i.e., 42% for Arochlor 1242 and 54% for Arochlor 1254).

Non-Cancer effects: Of the various PCB Arochlors, IRIS has at this time derived oral reference doses (RfD) for only two; Arochlor 1016 and Arochlor 1254. However, both RfDs are derived from laboratory studies of primates, rather than from rodents. Respective uncertainty factors for both RfDs are thus relatively low (100 and 300, respectively). The oral RfD for Arochlor 1016 is 7.0×10^{-5} mg/kg/day, based on monkey reproductive bioassays, with a critical toxicologic endpoint of reduced birth weights. For Arochlor 1254, IRIS lists an oral RfD of 2×10^{-5} mg/kg/day, based on ingestion studies in the Rhesus monkey. Various other studies have indicated potential neurobehavioral deficits in primates, and adverse effects on the gastrointestinal, hematological, musculoskeletal, hepatic, renal, immunological and reproductive systems in humans and animals exposed to PCB mixtures. PCBs are absorbed through ingestion, inhalation, and dermal exposure, after which they are transported similarly through the circulation. This provides a reasonable basis for expecting similar internal effects from different routes of environmental exposure. Information on relative absorption rates suggests that differences in toxicity across exposure routes are small.

Cancer effects: Certain PCB Arochlors--1016, 1242, 1254 and 1260--have been classified by IRIS as B2 (probable human) carcinogens, based upon a 1996 study which found liver tumors in female rats exposed to these four Arochlors. These dosage mixtures contain overlapping groups of PCB congeners that, together, are currently thought to span the range of congeners most often found in environmental mixtures. Earlier studies have found high, statistically significant incidences of liver tumors in rats ingesting Arochlor 1260. EPA's IRIS database is currently updating the various available human studies. Currently available human evidence for carcinogenicity is inadequate, but suggestive.

It is important to note that because of their relatively well-characterized patterns of preferential partitioning across various environmental media, certain of the lower chlorinated PCB Arochlors; --especially 1016, 1221, and 1232--are not likely to bioaccumulate in fish tissue. Nor were these three PCB arochlors detected in any CRITFIC fish samples. Nonetheless, this study assigned these three arochlors with the more conservative choice of carcinogenic slope factors listed for various Arochlors (2×10^{-0} mg. kg/day-1; see IRIS).

The PCB Arochlors considered in this report are as follow:

Arochlor 1016: CASRN 12674-11-12

As discussed previously, Arochlors 1016 and 1254 are the only two PCB Arochlors for which IRIS has derived RfDs. IRIS lists an Oral RfD of $7.0\text{E-}5$ mg/kg/day for Arochlor 1016, based on a suite of various monkey reproductive bioassays conducted from 1984-1991. Critical effect was reduced birth weights, with a NOAEL of 0.007 mg/kg/day, and a LOAEL of 0.028 mg/kg/day. Confidence in the RfD is medium, with an uncertainty factor of 100. Within this, subfactors of 3 each are applied to account for sensitive individuals, for extrapolation from rhesus monkeys to humans, for limitations in the data base, and for extrapolation from a subchronic exposure to a chronic RfD.

In estimating the likely carcinogenic potential for this compound, EPA IRIS lists Arochlor 1016 as a Group B2 (probable human) carcinogen. This is based on a 1996 study which found tumors in rats orally exposed to Arochlors 1216, 1242, 1254, and 1260. The PCB dosage mixtures contained overlapping groups of specific PCB congeners that together span the range of congeners most often found in environmental mixtures. Significantly increased incidences of liver adenomas or carcinomas were found in female rats for all Arochlors tested, and in male rats for Arochlor 1260. Some of these tumors were hepatocholangiomas, a rare bile duct tumor seldom noted in control rats. In addition, for all Arochlors tested, male rats showed an increase in thyroid gland follicular cell adenomas or carcinomas.

Because of its lower degree of chlorination and relatively well-characterized patterns of preferential partitioning across various environmental media, Arochlor 1016 is not likely to

bioaccumulate in fish tissue, nor was this arochlor detected at any level in any of the CRITFC fish samples. However, for this and other PCB Arochlors associated with food chain exposure and other situations involving relatively high persistence and therefore higher risk, IRIS suggests a derived oral carcinogenic slope factor of $2\text{E}+0$ mg/kg/day.

Arochlor 1221: CASRN 11104-28-2

No oral RfD is available for Arochlor 1221 at this time.

This lower-chlorinated arochlor is not expected to significantly bioaccumulate in fish tissue, nor was it detected in any of the CRITFC fish samples. However, for this and other PCB Arochlors associated with food chain exposure and other situations involving relatively high persistence and therefore higher risk, IRIS has recommended an oral carcinogenic slope factor of $2\text{E}+0$ mg/kg/day.

Arochlor 1232: CASRN 11141-16-5

No oral RfD is available for Arochlor 1232 at this time.

Arochlor 1232 is not expected to significantly bioaccumulate in fish tissue, nor was it detected in any of the CRITFC fish samples. However, for this and other PCB Arochlors associated with food chain exposure and other situations involving relatively high persistence and therefore

higher risk, IRIS has recommended an oral carcinogenic slope factor of 2E+0 mg/kg/day.

Arochlor 1242: CASRN 53469-21-9

No oral RfD is available for Arochlor 1242 at this time.

In terms of carcinogenic potential for this compound, IRIS lists Arochlor 1242 as a Group B2 (possible human) carcinogen. This is based on a 1996 study which found tumors in rats orally exposed to Arochlors 1242, 1016, 1254 and 1260. The PCB dosage mixtures contained overlapping groups of congeners that together span the range of congeners most often found in environmental mixtures. Significantly increased incidences of liver adenomas or carcinomas were found in female rats for all Arochlors tested, and in male rats for Arochlor 1260. Some of these tumors were hepatocholangiomas, a rare bile duct tumor seldom noted in control rats. In addition, for all Arochlors tested, male rats showed an increase in thyroid gland follicular cell adenomas or carcinomas.

For PCB 1242 and other Arochlors associated with food chain exposure and other situations involving relatively high persistence and therefore higher risk, IRIS has recommended an oral carcinogenic slope factor of 2E+0 mg/kg/day.

Arochlor 1248: CASRN 12762-29-6

No oral RfD is available for Arochlor 1248 at this time. The USEPA RfD/RfC Work Group deemed the database at the time of review to be insufficient to derive an oral RfD according to the current Agency guidelines. The status does not preclude the use of information in cited references for assessment by others (see IRIS). Derivation of an oral RfD for Arochlor 1248 is not recommended because a “frank effect” (death of an infant) was noted at the lowest dose tested in a sensitive animal species, the Rhesus monkey. In general, Rhesus monkeys have shown adverse effects to PCB mixtures at doses tenfold lower than in other species.

For PCB 1248 and other Arochlors associated with food chain exposures and other situations involving relatively high persistence and therefore higher risk, IRIS has recommended an oral carcinogenic slope factor of 2E+0 mg/kg/day.

Arochlor 1254: CASRN 11097-69-1

As discussed previously, Arochlors 1254 and 1016 are the only two PCB Arochlors for which IRIS has derived RfDs at this time. The oral RfD for Arochlor 1254 is 2E-5mg/kg/day. This is based on data from clinical and immunological ingestion studies on Rhesus monkeys, conducted in 1989, 1991, and 1994. The LOAEL was defined as 0.005 mg/kg-day. No NOAEL was established in this study. Critical effects included ocular exudate, inflamed and prominent eyelid Meibomian glands, distorted growth of finger and toe nails, and decreased antibody (IgG and IgM) response. An uncertainty factor totaling 300 is used in this evaluation. It includes a 10-fold factor which is applied to account for sensitive individuals, and a factor of 3 which is applied

because of the extrapolation from primates to humans. An additional tenfold factor was also included, due to inconsistencies in effect levels for reproductive toxicity in the available database. Confidence in the RfD is medium due to inconsistencies in effect levels for reproductive toxicity.

In assessing potential carcinogenicity, IRIS lists Arochlor 1254 in Group B2 (probable human carcinogen). This is based on a 1996 study which found tumors in (especially female) rats orally exposed to Arochlors 1254, 1016, 1242 and 1260. The PCB dosage mixtures contained overlapping groups of congeners that together span the range of congeners most often found in environmental mixtures. Significantly increased incidences of liver adenomas or carcinomas were found in female rats for all Arochlors tested, and in male rats for Arochlor 1260. Some of these tumors were hepatocholangiomas, a rare bile duct tumor seldom noted in control rats. In addition, for all Arochlors tested, male rats showed an increase in thyroid gland follicular cell adenomas or carcinomas.

For PCB 1254, and other Arochlors associated with food chain exposure and other situations involving relatively high persistence and therefore higher risk, IRIS has recommended an oral carcinogenic slope factor of $2E+0$ mg/kg/day.

Arochlor 1260: CASRN 11096-82-5

No oral RfD is available for Arochlor 1260 at this time.

In assessing the potential carcinogenicity of this compound, EPA IRIS lists Arochlor 1260 in Group B2 (probable human carcinogen). This is based on a 1996 study which found tumors in rats orally exposed to Arochlors 1260, 1016, 1242 and 1254. The PCB dosage mixtures contained overlapping groups of PCB congeners that together span the range of congeners most often found in environmental mixtures. Significantly increased incidences of liver adenomas or carcinomas were found in female rats for all of the four Arochlors tested, and in male rats for Arochlor 1260. Some of these tumors were hepatocholangiomas, a rare bile duct tumor seldom noted in control rats. In addition, for all Arochlors tested, male rats showed an increase in thyroid gland follicular cell adenomas or carcinomas.

For PCB 1260 and other Arochlors associated with food chain exposure and other situations involving relatively high persistence and therefore higher risk, IRIS has recommended an oral carcinogenic slope factor of $2E+0$ mg/kg/day.

Specific PCB Congeners: (see also discussion on chlorinated dioxins and furans)

The “PCB Arochlors” discussed above are in fact, complex mixtures of various individually distinct PCB molecules, each of which may vary considerably in terms of the specific structural location and extent of chlorination. Each molecule of such a PCB mixture has 10 positions which can be occupied by a chlorine atom.

The placement and number of chlorine atoms into these positions determine the physical and

chemical properties--and the toxicological significance-of the specific PCB molecule in question. There are 209 different possible arrangements of the chlorines in the 10 available positions. Each unique arrangement is called a "PCB Congener". The fate and biological activity of each PCB congener is thus highly influenced by the number and placement of chlorines. Of the 209 possible chlorinated PCB congeners, only 20 have non-ortho chlorine substitutions in the biphenyl rings. Because of this, these particular congeners--substituted in the para and meta positions--can attain a planarity which makes their structure similar to the highly toxic dibenzo-p-dioxins and dibenzofurans.

Especially important within this group of 20 PCB congeners are the PCB congeners having four, five, or six chlorines in non-ortho positions. For example, three such PCB congeners have shown to be significantly potent mimics of 2,3,7,8-TCDD and 2,3,7,8-TCDF, in terms of enzyme induction and toxic effects.

These three congeners of particular toxicological importance are:

PCB 77: (3,3',4,4'-tetrachlorobiphenyl) CASRN 32598-13-3

The Relative Potency Factor (compared to 2,3,7,8-TCDD dioxin) for PCB 77 is 0.0001.

PCB 126: (3,3',4,4',5-pentachlorobiphenyl) CASRN 57465-28-8

The Relative Potency Factor for PCB 126 is 0.1, which is the highest TEQ yet assigned to any of the various dioxin-like PCB congeners.

PCB 169: (3,3',4,4',5,5'-hexachlorobiphenyl) CASRN 32774-16-6

The Relative Potency Factor for PCB 169 is 0.01.

Mono-ortho substitutions of chlorine on the biphenyl rings of these three toxic congeners can also exhibit significant toxicity. Such mono-ortho substitutions of (the tetra-chloro) PCB 77 yield the two penta-chloro PCB congeners, 105 and 118.

Similar mono-ortho substitutions of (penta-chloro) PCB 126 result in the formation of the three hexa-chloro PCB congeners 156, 157, and 167. Mono-ortho chlorine substitution for (hexa-chloro) PCB 169 yields a single compound, the hepta-chloro PCB congener 189.

For certain of the PCB congeners, there has thus been a very critical mechanistic linkage of the toxicity of certain configurations with that of the highly toxic 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD), and 2,3,7,8-tetrachlorodibenzofuran (TCDF). These "dioxin-like" PCB congeners are those which are co-planar (relatively flattened in shape), like TCDD/TCDF, and which contain chlorines in the non-ortho and mono-ortho positions on the molecule.

Because of this structural similarity between toxicologically significant individual PCB congeners and TCDD dioxin, theoretical health risks for the PCB congeners are assessed in a fashion similar to those for the chlorinated dibenzo-p-dioxin (CDD) and chlorinated dibenzofuran (CDF) congeners. ***That is to say, the traditional “reference dose” (RfD) approach for non cancer endpoints, is not used in assessing the various “dioxin-like” co-planar PCBs.*** Instead, the assessment of risk from these dioxin-like individual PCB congeners relies on the use of Toxicity Equivalent Factors (TEF) as described below.

Using Toxicity Equivalent Factors (TEF) as an estimate of relative toxicity: As mentioned elsewhere in this document, 2,3,7,8-TCDD is the most toxic and extensively studied of this general class of related compounds, and serves as a prototype for the various toxicologically relevant or “dioxin-like” PCB congeners, as well as for the various other CDD and CDF. Of all

these various related and toxicologically significant compounds, only 2,3,7,8-TCDD has thus far been assigned a oral carcinogenic slope factor ($1.5E+5$; which conveys the highest potency for any synthetic chemical studied thus far). Based on the results of animal studies, scientists have learned that they can express the toxicity of dioxin-like PCB congeners (and various other related CDD and CDF) as a fraction of the toxicity attributed to 2,3,7,8-TCDD. For example, the toxicity a given dioxin-like PCB congener could be half, or one tenth, or any fraction of that of 2,3,7,8-TCDD.

Scientists call that fraction a ***Toxicity Equivalent Factor (TEF)***. Although the dose necessary to elicit a toxic response differs between congeners, the relative potency of the different PCB congeners (in comparison to 2,3,7,8-TCDD) is generally consistent for each endpoint. This general consistency has allowed the World Health Organization (WHO) to develop a formal and universally accepted toxicity equivalent factor approach to convert any of the toxicologically significant co-planar PCB congeners—as well as any of the 17 possible toxicologically significant CDD/CDF congeners—into an equivalent concentration of 2,3,7,8-TCDD. Although this approach is commonly used today in the evaluation of risk due to dioxin-like co-planar PCBs, as well as for chlorinated dibenzodioxins and chlorinated dibenzofurans, it is an “interim” method, and does not necessarily replace the need for congener-specific data. (See also discussions for CDD/CDF).

Dioxin-like PCB congeners are responsible for only part of the theoretical carcinogenicity of a total PCB mixture which has been partitioned into the environmental media via natural processes over time. To account for the fact that relative concentrations of dioxin-like congeners may be enhanced in environmental mixtures, especially in fish due to bioaccumulation of the more persistent congeners, the 1998 WHO/ICPS/TEFs are used in this risk characterization process. The various TEFs assigned to each specific PCB congener are discussed below under each individual compound. (For additional background on TEFs, see also the discussion section on Dioxins/Furans)

According to Hansen (1998), the fifteen most “environmentally abundant” of the 209 various PCB congeners are: PCB 1, 3, 15, 18, 28, 31, 33, 44, 49, 52, 66, 95, 118, 153, and 180. This is of course, very debatable, and is largely dependant on the type, history, and location of the

environmental media being sampled and analyzed. Prevalence in the environment is one thing; but toxicological significance is another.

PCB congeners identified at detectable levels in this report include: PCB 77, 105, 114, 118, 123, 126, 156, 157, 167, 169, 170, 180, and 189. It is important to note that all three of the (more dioxin-like) non-ortho substituted congeners, and all 6 of their possible (also toxic to some extent) mono-ortho substituted forms were detected in at least some of the fish sampled.

The chemical nature and toxicity profiles of these various individual congeners are as follow:

PCB 77: 3,3',4,4'-tetrachlorobiphenyl; CASRN 32598-13-3 (See also PCB congeners 105, 118)

Like PCB 126 and 169, PCB 77 is also a non-ortho substituted co-planar molecule, and structurally resembles TCDD and TCDF. It thus possesses significant toxicity. Because of the symmetry and positioning of the four chlorine atoms, and also because of its “co-planar structure”, this PCB congener and its close relatives are structurally somewhat similar to the “dioxin” molecule (specifically, 2,3,7,8-tetrachlorodibenzo-p-dioxin; TCDD). Thus, the toxicity and biological significance of PCB Congener 77 and its close relatives is in general, higher than that of more highly chlorinated PCB congeners which do not share this identical chlorine configuration.

As with all the individual PCB congeners, at this time IRIS has not established a RfD for non-cancer effects for PCB 77. The available literature indicates that the oral acute toxicity of PCB 77 (guinea pig) is 1 mg/kg. In research studies of chronic exposure, at doses ranging from 7-124 mg/kg during days 10-16 of pregnancy, PCB 77 has also been shown to cause reproductive toxicity in the rat and mouse (impairment of fertility, specific developmental abnormalities, behavioral and other effects on the newborn, fetotoxicity, etc), and in the monkey (aborted fetus; 6.3 mg/kg dose given from days 20-40 of pregnancy). Additional chronic effects of PCB 77 include liver and endocrine changes (rodents), and blood and endocrine changes (monkey). PCB 77 also causes DNA adduct formation *in vitro* studies of liver from humans, rats, and quail. The WHO TEF for PCB 77 is 0.0001.

IRIS does not list an oral carcinogenic slope factor for PCB 77, or for any of the other specific PCB Congeners. However, based on various structural similarities between PCB 77 and TCDD, EPA has calculated a Relative Potency Factor of 0.0001 for PCB 77.

PCB 105: 2,3,3',4,4'-pentachlorobiphenyl; CASRN 32598-14-4

PCB 105 is a mono-ortho chlorine substituted analog of the toxic congener PCB 77. Thus, it can be likewise expected to possess significant toxicity. Because of the positioning of chlorines at the four critical ring positions, this PCB congener is thus also structurally somewhat similar to TCDD. In terms of structure-activity relationships, however, the addition of the additional chlorine at position 2 presents just enough asymmetry to “theoretically” make the molecule

somewhat different in its “efficacy” at the receptor site.

Very little toxicological data could be found for this PCB congener. However, the acute intraperitoneal mouse LD50 is approximately 400 mg/kg. In mice, PCB 105 was also found to induce changes in liver, and blood. For non-cancer effects, IRIS has not at this time established a specific oral RfD for PCB 105.

IRIS has likewise at this time not established an oral carcinogenic slope factor for PCB 105. The Relative Potency Factor for PCB 105 (compared to that of TCDD) is 0.0001.

PCB 114: 2,3,4,4',5-pentachlorobiphenyl; CASRN 74472-37-0

Detailed toxicological information about PCB 114 could not be located in the available literature. As with all individual PCB Congeners, IRIS has not at this time derived an oral RfD for non-cancer effects of PCB 114.

IRIS likewise does not list an oral carcinogenic slope factor for PCB 105. However, EPA has developed a relative potency factor for this PCB congener, based on its various structural similarities to that of TCDD. For PCB 114, this relative potency factor is 0.0005.

PCB 118: 2,3',4,4',5-pentachlorobiphenyl; CASRN 31508-00-6

PCB 118 is a mono-ortho chlorine substituted analog of the toxic PCB congener 77. It can thus be expected to possess significant toxicity. PCB 118 also causes reproductive effects; most of the studies with this compound have been done with rats. Oral doses of 28-112 mg/kg during days 10-16 of pregnancy (rat) have resulted in reduced weight gain, and biochemical, metabolic, and behavioral effects on the newborn. Adult rats receiving 15 ug/kg continuously for 13 weeks have also undergone degenerative changes in brain and liver, as well as toxicant-induced changes in neurochemistry (dopamine). As with all individual PCB Congeners, IRIS has not at this time derived an oral RfD for non-cancer effects of PCB 118.

IRIS does not list an oral carcinogenic slope factor for PCB 118. However, EPA has developed a relative potency factor for this congener, based on its various structural similarities to that of TCDD. For PCB 118, this relative potency factor is 0.0001.

PCB 123: 2',3,4,4',5-pentachlorobiphenyl; CASRN 65510-44-3

Detailed toxicological information about PCB 123 could not be located in the available literature. As with all individual PCB Congeners, IRIS has not at this time derived an oral RfD for non-cancer effects of PCB 123.

IRIS does not list an oral carcinogenic slope factor for PCB 123. However, EPA has developed a relative potency factor of 0.0001 for PCB 123, based on its relative potency and structural resemblance to TCDD.

PCB 126: 3,3',4,4',5-pentachlorobiphenyl; CASRN 57465-28-8 (See also PCB congeners 156, 157, and 167)

Like PCB 77 and 169, PCB 126 is also a non-ortho substituted, coplanar molecule, which thus resembles the structure of TCDD and TCDF, and subsequently possesses significant toxicity. PCB 126 has been found to cause specific developmental abnormalities in mice. These include urogenital abnormalities (doses of 131 ug/kg, and 522 ug/kg, 10 D of pregnancy), and craniofacial abnormalities involving nose and tongue (522 and 783 ug/kg, 10D of pregnancy). Other maternal effects were noted at the higher dose. As with all individual PCB Congeners, IRIS has not at this time derived an oral RfD for non-cancer effects of PCB 126.

IRIS does not list an oral carcinogenic slope factor for PCB 126. However, EPA has developed a relative potency factor for this congener, based on various aspects of its structural resemblance to TCDD. For PCB 126, the relative potency factor is 0.1, which is the highest TEQ developed thus far for any specific PCB congener.

PCB 156: 2,3,3',4,4',5-hexachlorobiphenyl; CASRN 38380-08-4

In terms of chlorine substitution on the biphenyl ring, PCB 156 is a mono-ortho substituted analog of the significantly toxic coplanar PCB 126. It would thus be presumed to have significant biological activity, and subsequent toxicity. In the mouse, an 80 mg/kg dose from 10-13D of pregnancy produced reproductive effects; specifically these were developmental abnormalities in the urogenital system. A dose of 480 mg/kg administered over the same time interval in pregnant dams produced craniofacial developmental abnormalities in nose and tongue. In the rat, 33.3 mg/kg continuous dose resulted in multi-organ effects, characterized by changes in the weights of liver, kidney, ureter, bladder and thymus. As is the case with all individual PCB Congeners, IRIS has not at this time derived an oral RfD for non-cancer effects of PCB 156.

IRIS does not list an oral carcinogenic slope factor for PCB 156. However, EPA has developed a relative potency factor for this congener, based on various aspects of its structural resemblance to TCDD. For PCB 156, the relative potency factor is 0.0005.

PCB157: 2,3,3',4,4',5' hexachlorobiphenyl; CASRN 69782-90-7

In terms of chlorine substitution on the biphenyl ring, PCB 157 is a mono-ortho substituted analog of the significantly toxic congener, PCB 126. It can thus be presumed to have a significant likelihood of biological activity, and subsequent toxicity. (According to RTECS, PCB 157 is similar in health effects to PCB 156. This would seem mechanistically plausible, since both are mono-ortho substituted analogs of PCB 126. See above information for PCB 156.) As is the case with all individual PCB Congeners, IRIS has not at this time derived an oral RfD for non-cancer endpoints of PCB 157.

IRIS does not list an oral carcinogenic slope factor for PCB 157. However, EPA has developed a relative potency factor for this congener, based on various aspects of its structural resemblance to

TCDD. For PCB 157, the relative potency factor is 0.0005.

PCB 167: 2,3',4,4',5,5'-hexachlorobiphenyl; CASRN 52663-72-6

In terms of chlorine substitution on the biphenyl ring, PCB 167 is a mono-ortho substituted analog of the significantly toxic congener, PCB 126. It would thus be presumed to have a significant likelihood of biological activity and subsequent toxicity.

Detailed toxicological information about PCB 167 could not be located in the available literature. As is the case with all the various individual PCB Congeners, IRIS has not at this time derived an oral RfD for non-cancer endpoints of PCB 167.

In like fashion, IRIS does not list an oral carcinogenic slope factor for PCB 167. However, EPA has developed a relative potency factor for this congener, based on various aspects of its structural resemblance to TCDD. For PCB 167, the relative potency factor is 0.00001.

PCB 169: 3,3',4,4',5,5'-hexachlorobiphenyl; CASRN 32774-16-6 (See also PCB 189)

Like PCB 77 and PCB 126, PCB 169 is a non-ortho substituted co-planar molecule, which resembles that of TCDD and TCDF, and thus possesses significant toxicity. Oral LD50 for the guinea pig (by far the most sensitive species to “dioxin-like” toxicity) is 223 ug/kg. In the mouse, reproductive toxicity studies of PCB 169 given at doses of 10 mg/kg, to pregnant females from days 6-15 resulted in developmental abnormalities in the hepatobiliary system. A dose of 20 mg/kg resulted in craniofacial and urogenital developmental abnormalities. Doses of 40 and 80 mg/kg resulted in fetotoxicity and fetal death. In the rabbit, a dose of 37.8 mg/kg to pregnant females from day 1-28 caused toxic maternal effects, as well as behavioral and other postnatal effects on the newborn rabbits.

Continuous oral dosing of mice, at 58.8 mg/kg-day for 28 days resulted in multiple hepatic effects and endocrine changes. Effects on serum composition (total protein, bilirubin, cholesterol, etc.) were also noted. As is the case with all the various individual PCB Congeners, IRIS at this time has not developed an oral RfD for non-cancer effects of PCB 169.

In like fashion, IRIS does not list an oral carcinogenic slope factor for PCB 169. However, EPA has developed a relative potency factor for this congener, based on various aspects of its structural resemblance to TCDD. For PCB 169, the relative potency factor is 0.01.

PCB 170: 2,2',3,3',4,4',5-heptachlorobiphenyl; CASRN 35065-30-6

Detailed toxicological information about PCB 170 could not be located in the available literature. As is the case with all individual PCB Congeners, IRIS at this time has not derived an oral RfD for non-cancer endpoints for PCB 170.

In terms of assessing the likelihood of possible carcinogenic effects, IRIS/EPA have likewise not developed a carcinogenic slope factor for PCB 170. At one time, PCB 170 was included on the World Health Organization (WHO) list of various PCB congeners having relative potency factors, but has now been removed from this list. At this time, no relative potency factor is thus available for PCB 170.

PCB 180: 2,2',3,4,4',5,5'-heptachlorobiphenyl; CASRN 35065-29-3

Detailed toxicological information about PCB 180 could not be located in the available literature. As with all individual PCB Congeners, IRIS has at this time not derived an oral RfD for non-cancer effects of PCB 180.

At one time, PCB 180 was included on the WHO list of various PCB congeners having potency factors, but it has now been removed from this list. Therefore, no relative potency factor has been developed or adopted for PCB 180.

PCB 189: 2,3,3',4,4',5,5'-heptachlorobiphenyl; CASRN 39635-31-9

In terms of its chlorine substitution on the biphenyl ring, PCB 189 is a mono-ortho analog of the (significantly toxic) PCB 169, which makes it of concern from the standpoint of likely biological activity and potential toxic effects.

Detailed toxicological information about PCB 189 could not be located in the available literature. As is the case with all the various PCB Congeners, IRIS at this time has not derived an oral RfD for non-cancer effects of PCB 189.

IRIS likewise does not list an oral carcinogenic slope factor for PCB 189. However, EPA has developed a relative potency factor for this congener, based on various aspects of its structural resemblance to TCDD. For PCB 189, the relative potency factor is 0.0001.

DIOXINS AND FURANS:

“Dioxin” is a general term referring to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) and its related congeners. The toxicity of the chlorinated dibenzodioxins(CDDs) and the closely related dibenzofurans (CDFs) varies with the position and number of chlorines attached to the aromatic rings of the molecule(s) in question. Under the laws of chemistry and physics, and under industrial and environmental conditions as we know them, it is chemically possible to form a total of 75 different individual chlorinated CDDs, and a total of 135 different individual CDFs. Of these, only about seventeen individual compounds (7 CDDs and 10 CDFs) are of sufficient toxicological and environmental significance to be considered in this report. These compounds constitute the seventeen different possible species of tetra-(having 4 chlorines) through octa-(having 8 chlorines) chlorinated CDDs and CDFs which can be formed and exist in the environment. Those dioxins/furans with chlorines (and sometimes other halogens like bromine)

at the 2, 3, and 7 positions on the ring are particularly toxic, with 2,3,7,8-TCDD considered to be the most toxic and biologically significant of all the various possible chlorinated dioxin/furan congeners. Likewise, the 2,3,7,8 tetrachlorodibenzofuran (TCDF) is the most toxic of the various chlorinated dibenzofuran congeners.

The chlorinated dibenzodioxins and chlorinated dibenzofurans are not produced intentionally by industrial processes. Rather, most CDDs and CDFs are generated in very small amounts as unwanted impurities of certain products and processes which utilize chlorinated compounds. Probably the most famous example of this was the finding in the late 1960's that the production process for the widely used herbicide 2,4,5-trichlorophenoxy acetic acid (2,4,5-T) also resulted in the formation of small quantities of the extremely toxic CDD contaminant, 2,3,7,8-TCDD. Herbicide 2,4,5-T was a major ingredient in the military defoliant, "Agent Orange", which was used extensively during the Vietnam War. In the post-Vietnam era, this dioxin contaminant soon gained extreme public and scientific notoriety, and over the ensuing several decades generated a tremendous amount of research interest from the biomedical community worldwide. Other production chemicals which can generate unwanted trace amounts of 2,3,7,8-TCDD included the forestry herbicide 2,4,5-Trichlorophenoxy propionic acid (Silvex), and the industrial chemical 2,4,5-Trichlorophenol. Unwanted trace amounts of some of the higher-chlorinated CDDs, especially the hexa and octa isomers, have also associated with the production of the widely used wood preservative, Pentachlorophenol (PCP).

In the case of the chlorinated dibenzofurans, most of what we know about the health effects of CDF come from studies of accidental poisonings in Japan ("Yusho Disease") and Taiwan (Yu-Cheng Disease") in the 1960s and 1970s, where over a several month period, many people ate food cooked in PCB-contaminated rice oil, which also contained CDF. In heating the PCB-contaminated oil for cooking purposes, it is presumed that additional CDF were generated. Since the formation and contributory toxicity of CDF in such PCB mixtures was relatively unknown at that time, it was at first believed that primarily PCBs were responsible for the toxicity. (See also discussion on PCBs) Adverse health effects in the exposed populations included skin and eye irritation, severe chloracne, darkened skin color and swollen eyelids with discharge. However, these effects did not develop in some people until weeks or months after exposure. Also noted were vomiting, diarrhea, anemia, more frequent lung infections, numbness and other neurological effects, and mild changes in the liver. Children born to poisoned mothers also had acne and other skin irritations. Young children of these mothers also had some learning difficulties, but whether or not this effect was permanent has not been conclusively established. It is unknown whether these health effects were caused by CDFs alone, or by CDF and PCBs in combination.

Small amounts of CDFs/CDDs can also enter the environment from a number of other sources. As alluded to previously, accidental fires or breakdowns involving capacitors, transformers, and other electrical equipment (e.g., fluorescent light fixtures which contain polychlorinated biphenyls (PCBs) are known to release high levels of CDFs, and to a lesser extent, CDDs, formed by thermal degradation). CDFs are also produced as unwanted compounds during the manufacture of several chlorinated chemicals and consumer products, including certain wood

treatment chemicals, some metals, and paper products. When the waste water, sludge, or solids from these processes are released into waterways or soil in dump sites, the sites become contaminated with CDFs/CDDs. These unwanted contaminants also enter the environment from burning municipal and industrial waste in incinerators, as well as from leaded gasoline exhaust, and the burning of coal, wood, or oil for home heating and production of electricity. Many of the various chemicals and processes which significantly produce CDFs/CDDs in the environment are either being slowly phased out or are strictly controlled. It is currently believed that CDF/CDD emissions associated with human incineration and combustion activities are the predominant environmental source. CDFs/CDDs also arise from natural sources in the environment, produced by natural thermal processes such as forest fires and volcanos.

Because of their chlorination and specific chemical structures, most CDFs/CDDs are highly fat soluble, and difficult for the body to quickly degrade and excrete. They are thus in some ways quite similar to some of the other persistent and bioaccumulative chlorinated residues like DDT, PCB, etc. Also like PCBs and the DDT group, CDFs/CDDs can bioaccumulate in fish, and the amount of CDFs in fish, for example, can sometimes be tens of thousands times higher than the levels in the surrounding water.

The liver appears to be the primary organ for acute exposure to CDDs and CDFs, but it should be also stressed that these compounds can also have other effects on a wide variety of organ systems. Effects of acute exposure include: hepatotoxicity, weight loss, psychological alterations, suppression of the immune system and death. Chronic effects include: teratogenicity, fetotoxicity, reproductive dysfunction, immunotoxicity, and carcinogenicity. For purposes of risk assessment, it is important to note that CDFs and/or CDDs are found in the environment together with other structurally-related chlorinated chemicals, such as some of the various co-planar PCB congeners (see PCB discussion). Therefore, people are generally exposed to mixtures of these structurally similar compounds, rather than to a single CDF, CDD or PCB congener.

In terms of toxicity and risk assessment, the “reference dose” (RfD) approach (for non-cancer endpoints) is not used in assessing any of the various toxicologically significant CDD /CDF congeners. Nor is it utilized in assessing non-cancer risks from the various “dioxin-like” co-planar PCB congeners (see also PCB section).

Using Toxicity Equivalent Factors (TEF) as an estimate of relative toxicity: As mentioned previously in the discussion section for PCB congeners, 2,3,7,8-TCDD is the most toxic and extensively studied of the CDDs, and serves as a prototype for the toxicologically relevant or “dioxin-like CDD, CDF and PCB congeners. Based on results from animal studies, scientists have learned that they can express the toxicity of dioxin-like CDFs, CDDs, and co-planar PCBs as a fraction of the toxicity attributed to 2,3,7,8-TCDD. For example, the toxicity of dioxin-like CDDs can be half, or one tenth, or any fraction of that of 2,3,7,8-TCDD. Scientists call that fraction a **“Toxicity Equivalent Factor” (TEF)**. Although the dose necessary to elicit a toxic response differs between congeners, the relative potency of the different dioxin/furan compounds (in comparison to 2,3,7,8-TCDD and 2,3,7,8-TCDF) is generally consistent for each endpoint. This general consistency has allowed the World Health Organization (WHO) to develop a formal

and universally accepted toxicity equivalent factor (TEF) approach to convert any of the seventeen possible toxic CDF/CDD congeners into an equivalent concentration of 2,3,7,8-TCDD. Although this approach is commonly used today in the evaluation of risk due to chlorinated dibenzodioxins, chlorinated dibenzofurans, and “dioxin-like” co-planar PCBs, it is an “interim” method, and does not necessarily replace the need for congener-specific data. (See also discussion section for PCB congeners.)

2,3,7,8-TCDD Dioxin has a high cancer potency rating, with the highest slope factor for any synthetic organic compound thus far studied. TCDD target organs for carcinogenic tumors in animals include: liver, thyroid, lung, skin and soft tissue. As is the case with the various toxicologically significant co-planar PCBs (see also PCB section), carcinogenic slope factors have not been developed for any of the various CDFs, including the ten toxicologically significant ones discussed in this report. Of the seven different CDD congeners in this report, an oral carcinogenic slope factor has been developed only for 2,3,7,8-TCDD. The EPA has classified 2,3,7,8-TCDD as a Class B2 (probable human) carcinogen with a slope factor of $1.5E+5$, based on hepatocellular carcinomas and lung tumors observed in rodents. Currently, the slope factor is being re-evaluated due to recent advances in understanding of the mechanisms of dioxin toxicity and of the carcinogenic and noncarcinogenic health effects observed epidemiologically among exposed populations. However, because the EPA has not yet issued a final revision, the existing slope factor-- $1.5E+5$ as currently listed on HEAST--is used for 2,3,7,8-TCDD in this evaluation.

WHO TEF values for the various individual chlorinated dibenzo-p-dioxin isomers are listed as follow:

CHLORINATED DIBENZO-P-DIOXINS (CDDs) 2,3,7,8-TCDD: 2,3,7,8-Tetrachlorodibenzo-p-dioxin; CASRN 1746-01-6

The relative potency factor (WHO TEF) is 1.0.

1,2,3,7,8-PeCDD: 1,2,3,7,8-Pentachlorodibenzo-p-dioxin; CASRN 40321-76-4

The relative potency factor (WHO TEF) is 1.0.

1,2,3,4,7,8-HxCDD: 1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin; CASRN 39227-28-6

The relative potency factor (WHO TEF) is 0.1.

1,2,3,6,7,8-HxCDD: 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin; CASRN 57653-85-7

The relative potency factor (WHO TEF) is 0.1.

1,2,3,7,8,9-HxCDD: 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin; CASRN 19408-74-3

The relative potency factor (WHO TEF) is 0.1.

1,2,3,4,6,7,8-HpCDD: 1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin; CASRN 35822-46-9

The relative potency factor (WHO TEF) is 0.01.

OCDD: Octachlorodibenzo-p-dioxin; CASRN 3268-87-9

The relative potency factor (WHO TEF) is 0.0001.

Dibenzofuran: CASRN 132-64-9

For noncarcinogenic effects, IRIS has listed an RfD of 4E-3 mg/kg/day. However, that RfD has been withdrawn, and is currently under further review by the EPA.

At this time, no carcinogenic slope factor has been developed for dibenzofuran.

CHLORINATED DIBENZOFURANS (CDFs):

Relative potency factors for the various individual chlorinated dibenzofuran isomers are listed as follow:

2,3,7,8-TCDF: 2,3,7,8-Tetrachlorodibenzofuran; 2,3,7,8-Tetrachlorodiphenylene oxide; CASRN 51207-31-9

The relative potency factor (WHO TEF) is 0.1.

1,2,3,7,8-PeCDF: 1,2,3,7,8-Pentachlorodibenzofuran; 1,2,3,7,8-Pentachlorodiphenylene oxide; CASRN 57117-41-6

The relative potency factor(WHO TEF) is 0.05.

2,3,4,7,8-PeCDF: 2,3,4,7,8-Pentachlorodibenzofuran; 2,3,4,7,8-Pentachlorodiphenylene oxide; CASRN 57117-31-4

The relative potency factor (WHO TEF) is 0.5.

1,2,3,4,7,8-HxCDF: 1,2,3,4,7,8-Hexachlorodibenzofuran; 1,2,3,4,7,8-Hexachlorodiphenylene oxide; CASRN 70648-26-9

The relative potency factor (WHO TEF) is 0.1.

1,2,3,6,7,8-HxCDF: 1,2,3,6,7,8-Hexachlorodibenzofuran; 1,2,3,6,7,8-Hexachlorodiphenylene oxide; CASRN 57117-44-9

The relative potency factor (WHO TEF) is 0.1.

1,2,3,7,8,9-HxCDF: 1,2,3,7,8,9-Hexachlorodibenzofuran; 1,2,3,7,8,9-Hexachlorodiphenylene oxide; CASRN 55673-89-7

The relative potency factor (WHO TEF) is 0.1.

2,3,4,6,7,8-HxCDF: 2,3,4,6,7,8-Hexachlorodibenzofuran; 2,3,4,6,7,8-Hexachlorodiphenylene oxide; CASRN 60851-34-5

The relative potency factor (WHO TEF) is 0.1.

1,2,3,4,6,7,8-HpCDF: 1,2,3,4,6,7,8-Heptachlorodibenzofuran; 1,2,3,4,6,7,8-Heptachlorodiphenylene oxide; CASRN 67562-39-4

The relative potency factor (WHO TEF) is 0.01.

1,2,3,4,7,8,9-HpCDF: 1,2,3,4,7,8,9-Heptachlorodibenzofuran; 1,2,3,4,7,8,9-Heptachlorodiphenylene oxide; CASRN 55673-89-7

The relative potency factor (WHO TEF) is 0.01.

OCDF: Octachlorodibenzofuran; 1,2,3,4,6,7,8,9-Octachlorodibenzofuran; 1,2,3,4,6,7,8,9-Octachlorodiphenylene oxide; CASRN 39001-02-0

The relative potency factor (WHO TEF) is 0.0001.

Nitrobenzene: CASRN 98-95-3

Nitrobenzene is an industrial chemical which is used in the manufacture of aniline, benzidine and quinoline. It is also used as a solvent, and in making lubricating oils, soap and shoe polish, as well as a preservative in spray paints. Because of these many uses, nitrobenzene may be released to the environment via various waste streams. The general population is most likely exposed to nitrobenzene via the inhalation of ambient air containing this compound, or by skin exposure to products and water containing it. Although photodegradation of this compound in water is relatively slow (half-life of about 133 days), nitrobenzene is expected to readily biodegrade under anaerobic conditions (50 per cent was degraded in 14 days when mixed with sewage inoculum). Nitrobenzene does not appear to biomagnify in aquatic ecosystems.

In humans, repeated exposures to high levels of nitrobenzene reacts with the red blood cells in the body, to produce methemoglobin. This reduces the ability of the blood to carry oxygen to vital tissues, and results in such symptoms as headache, irritability, weakness, drowsiness, etc. There is also some evidence that breathing high concentrations of nitrobenzene can harm the liver and/or kidney, and that the permissible occupational exposure levels might not necessarily be fully protective in the workplace. The toxic effects on blood and liver have also been demonstrated in laboratory exposure studies with rodents. Nitrobenzene is metabolized by the body to form p-nitrophenol and p-amino-phenol, which can be detected in the urine as a means of monitoring long-term (chronic) exposure.

The oral RfD for nitrobenzene is 5E-4mg/kg/day. This is based on a subchronic (90 day) rat/mouse inhalation study, with critical toxicological endpoints which include hematologic, adrenal, renal and hepatic lesions. The LOAEL (mice) for this study was 4.6 mg/kg/day (as converted from 25 mg/m³). For this RfD, the uncertainty factor is very high; 10000. This represents two 10-fold factors for both intra and inter-species variability, a 10-fold factor for estimating a chronic effects level from its subchronic equivalent, and an additional 10-fold factor for estimating an RfD from a LOAEL rather than from a NOAEL. Confidence in the RfD is thus low.

In terms of carcinogenic evaluation, EPA has assigned a weight-of-evidence-classification for nitrobenzene, of Group D (not classifiable as to human carcinogenicity). This chemical is not anticipated to be a carcinogen.

1,2-Dichlorobenzene: Ortho-dichlorobenzene; CASRN 95-50-1

1,2-Dichlorobenzene is used as an industrial solvent, and in the manufacture of 3,4-dichloroaniline. It has also been utilized as an insecticide. When benzene is chlorinated at various positions in its six-sided ring structure, it becomes more persistent in the environment. A general tendency is the more chlorines, the greater the persistence. Although not nearly as bioaccumulative and environmentally persistent as DDT or PCBs, etc, the potential for bioconcentration of this chemical in aquatic organisms is considered moderate to high, based on bioconcentration factors (BCF) in the range of 90 to 560, as measured in fish. Not surprisingly, 1,2-dichlorobenzene has thus been detected at low levels in a wide range of environmental samples. These have included various species of great lakes fish in the 1980s (1 ppb or less), flatfish off Los Angeles (up to 4 ppb), various European fish samples, etc. It has also been detected in human milk and adipose tissue.

Acute exposure to high doses of 1,2-dichlorobenzene primarily causes injury to liver. A secondary target organ is the kidney. Short exposures to high concentrations may also depress the central nervous system. NIOSH indicates that individuals who have pre-existing liver, kidney, skin, or chronic respiratory disease are at increased risk of adverse health effects if they are exposed to this chemical.

The oral RfD for 1,2-dichlorobenzene is 9E-2 mg/kg/day, based on a 2-year oral exposure study in rats. No critical toxicological endpoint was identified. NOAEL for this study was set at 120 mg/kg/day, adjusted to 85.7 mg/kg/day. An uncertainty factor of 1000 was applied, based on a 10-fold factor to account for uncertainty in extrapolating dose levels from laboratory animals to humans, another 10-fold factor for uncertainty in the threshold for sensitive humans, and a third 10-fold factor to account for the uncertainty due to the lack of studies assessing reproductive effects and other endpoints which were not adequately explored in the study design. Confidence in the RfD is low.

In terms of evaluating this chemical for likelihood of carcinogenicity, EPA has placed 1,2-dichlorobenzene in Group D (not classifiable as to human carcinogenicity). This is based on no human data, and on rodent data which are quite equivocal, showing both positive and negative trends.

1,3-Dichlorobenzene: meta-dichlorobenzene; CASRN 541-73-1

1,3-dichlorobenzene has been produced industrially for use in fumigation. It has also been marketed and applied as an insecticide. The chlorination of benzene tends to increase its environmental persistence. In general, the greater the chlorination, the greater the persistence. Thus—although not nearly as bioaccumulative and persistent in the environment as DDT and

PCBs-1,3-dichlorobenzene has been detected frequently in a wide range of environmental samples and media. According to the TOXNET database, a zero per cent theoretical BOD in sludge for this compound, over a 4 week incubation period suggested that biodegradation is expected to be slow in soil and water. A survey of human milk from the Canadian general population, detected 1,3-dichlorobenzene residues in 17 per cent of the samples, at an average concentration of 2 parts per billion (ppb).

Like other dichlorobenzenes, the primary target organ for 1,3-dichlorobenzene is the liver, where it is metabolized the mixed-phase microsomal oxidizing enzyme systems. A secondary toxic endpoint is the kidney.

NCEA has derived a provisional oral RfD of 9×10^{-4} mg/kg/day, for 1,3-dichlorobenzene. This is based on a 1995 oral subchronic toxicity study in rats. Specific toxic endpoints involved thyroid and liver. At the test dose (9 mg/kg/day), significant increases in the incidence of colloid density depletion in the thyroid follicles, increases in serum cholesterol and SGOT levels, and decreases in serum LDH levels were noted over the 90 day dosing period. At higher doses, liver and anterior pituitary gland effects and possible hypermetabolism were observed. This study did not identify a NOAEL. The provisional RfD was obtained by dividing the LOAEL of 9 mg/kg/day by an uncertainty factor of 10,000. This was necessary to account for the uncertainty associated with extrapolating from a LOAEL identified in a subchronic study, interspecies extrapolation, human variability, and limitations in the database, especially the lack of toxicity data in a second species and the lack of adequate developmental and reproductive toxicity studies. Confidence in the provisional RfD is low.

At this time, EPA has not assessed this chemical in terms of potential carcinogenicity.

1,4-Dichlorobenzene: para-dichlorobenzene; CASRN 106-46-7

1,4-dichlorobenzene does not occur naturally. It has been produced and used extensively as an insecticide and deodorant. It is also used in making resins. It is one of the two chemicals (the other being naphthalene, which is more toxic, and has been largely phased out in favor of 1,4-dichlorobenzene) used commonly to make mothballs. It is also in making deodorant blocks for restrooms and garbage cans, and in controlling animal odors in stalls and similar confined areas. It is also used as an insecticide on fruit and a mildicide on tobacco, leather and some fabrics. Some toilet bowl cleaners also contain this chemical.

Because of such widespread use in our daily lives, 1,4-dichlorobenzene has been detected in the environment quite frequently. Somewhat not surprisingly for example, it has been found in about 13 per cent of the drinking water samples which utilize surface water sources. The average daily adult intake of this chemical is estimated by ATSDR to be about 35 micrograms, which comes primarily from breathing vapors of 1,4-dichlorobenzene that are released from products in the home. Although it, like the other chlorobenzenes, does possess some toxicity at sufficient levels of dose, these levels encountered in our daily environmental routine are not expected to result in harmful effects. 1,4-dichlorobenzene has been detected in fish; levels of about 1 to 4 parts per

billion have been measured in trout taken from the Great Lakes.

In humans, airborne concentrations of 1,4-dichlorobenzene in excess of 160 ppm are usually intolerable. However, under continuous levels of high workplace exposure, accommodation can apparently occur in which high levels can become more easily tolerated by exposed individuals.

1,4-dichlorobenzene is metabolized in the body to 2,5-dichlorophenol, which-measured in the urine-can serve as an indicator of exposure.

As with other chlorobenzenes as a group, the primary toxicological endpoint after acute dosages is the liver. Sufficiently high or sustained unusual dosage can also cause hematological and neurological effects. High oral doses cause kidney damage in male rats; this is most likely mediated mechanistically by interactions with alpha-2-microglobulin, which appears to be a metabolic hallmark specific to this gender and species. At very high inhaled concentrations, 1,4-dichlorobenzene is also irritating to the lung.

In an assessment of chronic toxicity and allowable risk, at low levels of exposure, NCEA has derived a provisional RfD of 3×10^{-2} mg/kg/day, for 1,4-dichlorobenzene. This based on a 1994 two-generation subchronic rat fertility study. The critical toxic endpoints in this study were liver changes and effects on developmental toxicity. NOAEL from this study was 30 mg/kg/day. An uncertainty factor of 1000 is applied (10 each to account for interspecies extrapolation, the production of sensitive humans, and for extrapolation from subchronic to chronic effects).

At this time, EPA has not assessed this chemical in terms of likely or potential carcinogenicity.

1,2,4-Trichlorobenzene: CASRN 120-82-1

1,2,4-trichlorobenzene is produced as a solvent, organic intermediate, insecticide, and dye carrier. It is also used as a dielectric fluid, to partially replace (the much more environmentally persistent and toxicologically significant) PCBs. It enters the environment via a number of waste stream pathways. The chlorination of benzene renders it more difficult to degrade, and thus more environmentally persistent than the parent molecule. In general, the greater the degree of chlorination, the greater the persistence. For this reason, 1,2,4-trichlorobenzene—while not nearly as persistent or bioaccumulative as DDT and PCBs—has been frequently detected in a wide range of environmental samples. The TOXNET database indicates that for this chemical, bioconcentration factors (BCF) values in the range of 120 to 1300 measured in fish, suggest that bioconcentration in aquatic organisms is likely to be high. It can be stored in adipose tissue, and while mobilization/excretion tends to be considerably more rapid than for DDT or PCBs, this accumulation in lipid can still be significant under conditions of sufficient chronic exposure. The general population may be exposed to 1,2,4-trichlorobenzene via inhalation of ambient air, and ingestion of food and drinking water.

Like other chlorinated benzenes, sufficient doses of 1,2,4-trichlorobenzene preferentially target the liver, and kidney. As in the case of most other chlorinated organic compounds of this variety,

it has been shown to induce mixed-function hepatic microsomal enzymes, as part of its biodegradation process. Apparently the metabolism of 1,2,4-trichlorobenzene is variable and complex, depending on the species. Rodent, dogs, and primates do not uniformly appear to metabolize this compound in the same fashion, according to the TOXNET databases.

The oral RfD for this chemical is 1E-2 mg/kg/day, based on a multi-generation rat reproductive study. Critical toxicological endpoints included increased adrenal weights, accompanied by vacuolization and other cellular changes. NOAEL was 14.8 mg/kg/day, with a LOAEL of 53.6 mg/kg/day. The RfD has an uncertainty factor of 1000. This reflects three 10-fold factors to respectively allow for extrapolating dose from animals to humans, allowing for sensitive humans, and to account for a lack of chronic studies. Confidence in the RfD is medium.

In terms of evaluation of this chemical for likelihood of carcinogenicity, EPA has placed this chemical in Group D (not classifiable as to human carcinogenicity).

1,2-Diphenylhydrazine: 1,1'-hydrazobis-benzene; CASRN 122-66-7

1,2-Diphenylhydrazine is a man-made chemical used the production of chemical dyes and certain medicines. Manufacture and use of diphenylhydrazine dyes is no longer practiced in the US.

Diphenylhydrazine has a low volatility and a tendency to partition into organic matrices. As such, this chemical can adhere to soil, and can be carried into the air along with windblown dust. According to ATSDR, it is rather labile in the environment. Diphenylhydrazine is rapidly transformed in water and air into various breakdown products, including azobenzene and benzidine. It is thus not commonly found as a pollutant in food, air, or natural soils. Levels which do occur at concentrations above the range of a part per million are thus probably the result of very recent contamination. There is no commonly accepted method for monitoring exposure to diphenylhydrazine as a result of oral ingestion.

There is relatively little information available in the literature about the toxicity of diphenylhydrazine. Studies in animals indicate that diphenylhydrazine is absorbed across the GI tract after ingestion, but the percentage of the dose that is absorbed has not been quantified. The distribution and elimination of diphenylhydrazine from the body are also not well understood. The compound is metabolized to a number of breakdown products in laboratory animals including aniline, benzidine and various benzene derivatives such as aminophenols. Each of these breakdown products may have their own particular toxicity. One study (NCI, 1978) found that diphenylhydrazine produced liver and GI degeneration in rats. However, the doses in this study which elicited toxicity were fairly high; 390 mg/kg/day. Diphenylhydrazine was not shown to be a specific developmental or reproductive toxicant, however the number of studies which have looked at these endpoints are very limited.

There is currently no oral RfD for diphenylhydrazine. The dose levels observed to lead to non-cancer effects appear to be higher than those used in studies of carcinogenicity. In rodents, acute oral lethality of 1,2-diphenylhydrazine is approximately 1000 mg/kg/day, and toxic

sequelae include liver damage, stomach damage, and death. Chronic oral dosing of rats in the laboratory at 40 ppm for 78 weeks have identified inflammation of lungs as a toxic endpoint. In studies of shorter duration (4 weeks) doses of 64 mg/kg/day have proven lethal. In mice, liver damage is also noted (at 400 ppm dose levels).

In terms of carcinogenic potential, EPA has classified 1,2-Diphenylhydrazine in Group B2 (possible human carcinogen). This is based on positive studies in both rats and mice. From the various available animal data, EPA has calculated an oral carcinogenic slope factor of 8.0×10^{-1} mg/kg/day⁻¹, for 1,2-Diphenylhydrazine. The slope factor is based on a National Cancer Institute (NCI) study (1978) in which rats and mice were fed diphenylhydrazine for 78 weeks. Increases in liver tumors (hepatocellular carcinomas and neoplastic nodules) were observed in treated male and female rats and treated female mice, but not in treated male mice. Female rats also developed breast tumors and male rats developed some skin cancers.

References

1. ATSDR (Agency for Toxic Substances and Disease Registry). 1990. Toxicological Profile for 1,2-diphenylhydrazine TP-91/26
2. NCI (National Cancer Institute.) 1978. Bioassay of Hydrazobenzene for Possible Carcinogenicity. U.S. DHEW Publication No. (NIH) 78-1342.

2,4-Dinitrotoluene: (2,4-DNT); 1-Methyl-2,4-dinitrobenzene; CASRN 121-14-2

2,4-dinitrotoluene is produced and used in the manufacture of dyes, ammunition, plasticizers in propellants, and in the manufacture of toluene diisocyanate. Available information suggests that this material is not widespread in the environment. The main group of persons at high risk for exposure to 2,4-dinitrotoluene is industrial workers involved in the manufacture or handling of this material in facilities such as ammunition, dye, and polyurethane plants. Potential for bioaccumulation in aquatic organisms is low.

Exposure to high doses of this material in animals has caused decreased sperm count, and reduced fertility. Animal studies have also shown that nervous system disorders, liver damage, and kidney damage can occur, as well as a reduction in the numbers of red blood cells.

The oral RfD for this chemical is 2×10^{-3} mg/kg/day, based on a two-year feeding study in dogs. Critical toxic endpoint was neurotoxicity, with some hematologic and biliary tract effects also noted. This RfD has an uncertainty factor of 100, to account for inter and intra-species variability. Confidence in the RfD is high.

Evaluated singly, 2,4-dinitrotoluene has not undergone a complete assessment by EPA in terms of possible carcinogenicity, nor has a carcinogenic slope factor been derived.

NOTE: EPA has evaluated “dinitrotoluene mixture”, which contains both 2,4-dinitrotoluene, and 2,6-dinitrotoluene. It has assigned this mixture a carcinogenicity weight-of-evidence classification of B2 (probable human carcinogen), based on findings of multiple benign and

malignant tumor types at multiple sites in both sexes of rats (2 strains), and malignant renal tumors in male mice. This classification is also supported by mutagenic evidence.

2,6-Dinitrotoluene: (2,6-DNT); 1-Methyl-2,6-dinitrobenzene; CASRN 606-20-2

The oral RfD for 2,6-dinitrotoluene is 1E-3 mg/kg/day. HEAST lists an uncertainty factor of 3000. Critical toxicologic endpoints in the rodent were mortality, Heinz body formation (seen in red blood cells; indicates abnormal hemoglobin), neurotoxicity, methemoglobinemia, bile duct hyperplasia and kidney histopathologies.

Evaluated singly, 2,6-dinitrotoluene has not undergone a complete assessment by EPA in terms of possible carcinogenicity, nor has a carcinogenic slope factor been derived.

NOTE: EPA has evaluated “dinitrotoluene mixture”, which contains both 2,4-dinitrotoluene and 2,6-dinitrotoluene. It has assigned this mixture a carcinogenicity weight-of-evidence classification of B2 (probable human carcinogen), based on findings of multiple benign and malignant tumor types at multiple sites in both sexes of rats (2 strains), and malignant tumors in male mice. This classification is also supported by mutagenic evidence.

POLYCYCLIC AROMATIC HYDROCARBONS (PAH):

The PAHs consist of a group of more than 100 different compounds, all of which have three or more hydrocarbon rings as part of their structure. Among this large group of PAHs, a core group of about twenty are frequently noted as common environmental contaminants. Some of these more environmentally common PAHs and their respective CASRN numbers include:

Acenaphthene: 83-29-9	Acenaphthylene: 208-96-8
Anthracene: 120-12-7	Benz[a]anthracene: 56-55-3
Benzo[a]pyrene: 50-32-8	Benzo[e]pyrene: 192-97-2
Benzo[b]fluoranthene: 205-99-2	Benzo[k]fluoranthene: 207-08-9
Benzo [g,h,i] perylene: 91-24-2	Benzo[j]fluoranthene: 205-82
Chrysene: 218-01-9	Dibenz[a,h] anthracene: 3-70-3
Fluoranthene: 206-44-0	Fluorene: 86-73-7
Indeno[1,2,3-c,d]pyrene: 193-39-5	Phenanthrene: 85-01-8
Pyrene: 129-00-00	

PAHs are common constituents of the environment, produced primarily by the burning of carbon-based materials, such as coal, oil and gas, garbage, etc. Other environmental input of PAHs comes from natural sources such as volcanoes, as well as from human sources such as automotive exhaust, power plant emissions or wood burning fireplaces. PAHs are found in the human diet, being particularly elevated in barbecued meats. PAHs are also present in tobacco smoke. Most PAHs have no significant industrial uses but are present in a number of commercial products including asphalt, roofing tar and creosote. A few are used in medicines, or to make dyes, plastics, and pesticides. Compared to chlorinated organics like DDT and PCBs, PAH are not so extremely persistent and/or bioaccumulative, in the general sense. However, depending on the type(s) and quantities of PAH involved, as well as the environmental medium in question (e.g., sediment), and the conditions at hand, PAH contamination can sometimes persist for a quite significant amount of time. PAHs generally have limited solubility in water so they are likely to be present at higher concentrations in soil or sediment than in water. PAHs have very low vapor pressures but may be present in air in particulate form, particularly in the vicinity of fires or fuel exhausts. There is no commonly available method for determining whether you have been exposed to PAHs.

Considerable effort has been devoted to studying the toxicological effects of PAHs. Studies in both humans and animals indicate that PAHs are absorbed across the GI tract and across the skin. Studies in rats have indicated that the GI absorption of PAHs is likely to be less than 100%, though the actual amount absorbed will depend on the specific PAH involved and the presence of other materials in the GI tract. Similar factors govern the degree of dermal absorption. Once absorbed, PAHs are found principally in the liver, kidneys and fat (ATSDR, 1995). PAHs are eliminated from the body after metabolism to more water soluble compounds. For any given PAH, the major endpoint of such biotransformation is to form detoxified metabolites which are rapidly excreted from the body. Studies in rats have indicated that much of the absorbed dose of PAHs is eliminated within several days after exposure (ATSDR, 1995).

Non-cancer Health Risks: Oral exposure to PAHs has been reported to cause increases in relative liver and kidney weight and some alterations in blood composition in laboratory animals (ATSDR, 1995). Mild pathological effects have also been observed in the kidney with certain PAHs (i.e., fluoranthene, pyrene). Exposure of mice to one PAH, benzo(a)pyrene, at a dose of 40 mg/kg/day during pregnancy did result in reduced pup weights and pup survival, as well as reproductive dysfunction in the progeny. Developmental effects of other PAHs have not been well characterized.

Oral RfDs have been established for a small number of environmentally important PAHs, primarily those which have not been demonstrated to be carcinogenic. These RfDs and the effect(s) on which they are based are discussed in greater detail under the toxicological profiles for each individual PAH compound (see below).

Carcinogenesis: Certain PAHs (benz[a]anthracene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, chrysene, dibenz[a,h]anthracene and indeno[1,2,3-c,d]pyrene) have been found to cause cancer in laboratory animals by both the oral and dermal routes of exposure. No studies have indicated that PAHs cause cancer in humans after ingestion, but studies of workers exposed to mixtures of PAHs in air have shown an increased cancer incidence (ASTDR, 1995). The ability these PAHs to cause cancer depends on metabolism of the PAH to form a reactive intermediate which may damage DNA. PAHs such as acenaphthene, acenaphthylene, anthracene, fluoranthene, fluorene, phenanthrene and pyrene have not been demonstrated to be carcinogenic; however, the available chronic data for these compounds is somewhat limited.

As stated above, certain PAHs have been demonstrated to cause cancer in laboratory animals. As part of PAH mixtures, they have also been shown to cause cancer in humans (IRIS, 2000). To characterize the carcinogenic potency of these PAHs, EPA has developed a relative potency approach. Because the carcinogenic properties of benzo[a]pyrene have been studied most extensively, EPA (1993) has developed a cancer potency factor for this compound and related the carcinogenic potency of the other compounds to that of benzo[a]pyrene. The corresponding cancer values are as follows:

Relative Potency Factor

Benzo[a]pyrene	1.0
Benz[a]anthracene	0.1
Benzo[b]fluoranthene	0.1
Benzo[k]fluoranthene	0.01
Chrysene	0.001
Dibenz[a,h]anthracene	1.0
Indeno[1,2,3-cd]pyrene	0.1

References

1. ATSDR (Agency for Toxic Substances and Disease Registry). 1995. Toxicological Profile for Polycyclic Aromatic Hydrocarbons (Update). US Dept. of Health and Human Services. Atlanta, GA
2. EPA, 1993. Provisional guidance for quantitative risk assessment of polycyclic aromatic hydrocarbons. Environmental Criteria and Assessment Office. Cincinnati, OH. Final Draft. ECAO-CIN-842.
3. IRIS (Integrated Risk Information System). 2000. EPA on-line database.

Acenaphthene: 1,2-Dihydroacenaphthylene; CASRN 83-29-9

Like other PAH, acenaphthene entering the environment is rarely found singly in a given waste stream, but is normally part of a complex mixture containing other PAH, along with many other associated compounds. As with other PAH, acute toxicity from acenaphthene is rarely reported. It does undergo microbial degradation, and is readily metabolized by multicellular organisms. EPA indicates that the half-life of acenaphthene in bluegill sunfish is less than one day.

The oral RfD for acenaphthene is 6E-2 mg/kg/day, based on a mouse oral subchronic study. Critical effect was hepatotoxicity, as evidenced by increased liver weights and enzyme changes. NOAEL for the study was 175 mg/kg/day, with a LOAEL of 350 mg/kg/day. EPA IRIS lists an uncertainty factor of 3000, and confidence in the oral RfD is low.

Acenaphthene has not been evaluated by EPA for carcinogenic potential at this time.

Acenaphthylene: Cyclopenta[d,e]naphthalene; CASRN 208-96-8

As with other PAH, acute toxicity from exposure to acenaphthene is rarely reported. The most likely exposure to acenaphthylene and other PAH is probably occupational, in places associated with processing, manufacture or use of materials like fossil fuels, coal tar, asphalt, carbon black, etc. Non-occupational exposures would most likely take place via urban atmospheres, contaminated drinking water supplies and recreational activities at contaminated sites.

Acenaphthylene at this time has no RfD listed on IRIS.

In terms of carcinogenic potential for this PAH, IRIS has classified it in Group D (not classifiable as to human carcinogenicity). This is because of a lack of available human data, and inadequate data from animal bioassays.

Anthracene: Paranaphthalene; CASRN 120-12-7

As with other PAH, acute toxicity from anthracene is relatively rare. The oral RfD for anthracene is 3E-1 mg/kg/day, based on a 1989 EPA study of subchronic toxicity in mice. No treatment-related, specific toxicologic endpoints were noted in the mice at the doses administered.

Accordingly, the NOAEL was assumed to be 1000 mg/kg/day, which was the highest dose tested. IRIS has assigned an uncertainty factor of 3000 for this RfD, and confidence in the RfD is likewise low. No LOAEL dose was derived.

In terms of carcinogenic potential, anthracene is classified by EPA IRIS in Group D (not classifiable as to human carcinogenicity). This is due to lack of adequate data on this PAH.

Benz[a]anthracene: Benzo[b]phenanthrene; CASRN 56-55-3

As with other PAH, acute toxicity from benz[a]anthracene is rarely reported. No oral RfD has been developed for this PAH, at this time.

In terms of its likely carcinogenic potential, EPA has placed benz[a]anthracene in Group B2 (probable human carcinogen). No oral carcinogenic slope factor has been developed for this PAH. However, EPA has established a relative carcinogenic potency factor of 0.1 for this PAH, based on the carcinogenic slope factor for benzo[a]pyrene.

Benzo[a]pyrene (BaP): Benzo[d,e,f]chrysene; CASRN 50-32-8

As with other PAH, acute toxicity from this compound is rarely noted. At this time, no oral RfD has been developed for this PAH.

In terms of its likely carcinogenic potential, EPA has placed BaP in Group B2 (probable human carcinogen). Although human data lacking BaP to a specific carcinogenic effect are lacking, the carcinogenicity of this compound in animal studies is extremely well documented, in numerous species, and by numerous dosing routes. The various animal data include dietary, gavage, inhalation, intratracheal instillation, dermal and subcutaneous studies in numerous strains of at least four species of rodents and several primates. Repeated BaP administration has been associated with increased incidences of total tumors, as well as tumors at the site of exposure. Distant site tumors have also been observed after BaP administration by various routes. BaP is frequently used as a positive control in carcinogenicity bioassays.

The oral carcinogenic slope factor for Benzo[a]pyrene is 7.3E+0 mg/kg/day. The relative carcinogenic potency factor for benzo[a]pyrene, established by EPA, is 1.0. Benzo[a]pyrene is the “standard” upon which the theoretical cancer potencies of the various other PAH compounds are modeled.

Benzo[b]fluoranthene: 3,4-Benz[e]acephenanthrylene; CASRN 205-99-2

As with other PAH, acute toxicity is rarely noted. At this time, no oral RfD has been developed for this PAH.

In terms of its likely carcinogenic potential, EPA has placed this PAH in Group B2 (possible human carcinogen). Although human data are lacking, this PAH has been found to produce

tumors in mice via several dosage routes—including lung implantation, injection, and direct application to skin.

EPA has established a relative potency factor of 0.1, for this PAH. This is based on comparisons to the relative potency of BaP, which serves as the standard for developing such PAH cancer potency models.

Benzo[k]fluoranthene: 8.9-Benzfluoranthene; CASRN 207-08-9

Like all PAH, acute toxicity from benzo[k]fluoranthene is infrequently noted. At this time, no oral RfD has been developed for this PAH.

In terms of its likely carcinogenic potential, EPA has placed this PAH in Group B2 (possible human carcinogen). Although human data are lacking, this PAH has produced tumors when administered as a promoting agent in skin painting studies with mice. It has also produced tumors after implantation in the mouse lung, and is known to be mutagenic in bacteria.

EPA has established a relative potency factor of 0.01 for this PAH, as based on its relationship to the carcinogenic potency of the BaP standard.

Chrysene: 1.2-Benzophenanthrene; CASRN 218-01-9

At this time, no oral RfD has been established for Chrysene.

In terms of likely carcinogenic activity, EPA has placed chrysene in Group B2 (probable human carcinogen).

EPA has established a relative potency factor of 0.001 for this PAH, in comparison to the carcinogenic potency of BaP.

Dibenz[a,h]anthracene: ,2:5,6-Dibenz[a]anthracene; CASRN 53-70-3

At this time, nor oral RfD has been established for Dibenz[a,h]anthracene.

In terms of likely carcinogenic potential, EPA has placed this PAH in Group B2 (probable human carcinogen).

EPA has established a relative potency factor of 1.0 for dibenz[a,h]anthracene, which makes it equipotent in this sense to (the classic and thoroughly studied, prototypical PAH carcinogen), BaP. Dibenz[a,h]anthracene produced carcinomas in mice after oral or dermal exposure, as well as injection site tumors in several species after intramuscular or subcutaneous administration. It has also induced gene mutations and DNA damage in bacteria, and gene mutations and transformation in several types of mammalian cell cultures.

Fluoranthene: 1,2-[1,8-Naphthylene]benzene; CASRN 206-44-0

The oral RfD for fluoranthene is 4E-2 mg/kg/day, based on a mouse subchronic study. Target toxicity endpoints included kidney damage, increased liver weights, hematological alterations and clinical effects. NOAEL was 125 mg/kg/day, with a LOAEL of 250 mg/kg/day. With an uncertainty factor of 3000, IRIS notes that the confidence in the RfD is low.

At this time, no cancer potency factor has been developed for fluoranthene. Due to lack of data, EPA has designated this PAH as Group D (not classifiable as to carcinogenicity).

Fluorene: Ortho-biphenylene methane; CASRN 86-73-7

The oral RfD for fluorene is 4E-2 mg/kg/day, based on a 1989 mouse subchronic study, which revealed critical hematological toxic endpoints of decreased red blood cells, packed cell volume, and hemoglobin. An uncertainty factor of 3000 is applied to this RfD. Confidence in the RfD is accordingly low.

At this time, no cancer potency factor has been developed for fluorene. Due to lack of data, EPA has designated this PAH as Group D (not classifiable as to carcinogenicity).

Indeno(1,2,3-cd)pyrene: 1,10-[1,2-Phenylene]pyrene; CASRN 193-39-5

At this time, no RfD has been developed for this PAH.

EPA has classified this PAH in Group B2 (possible human carcinogen).

EPA has established a relative potency factor of 0.1 for this PAH, as compared to the standard potency (1.0) for BaP.

Pyrene: benzo[d,e,f]phenanthrene; CASRN 129-00-00

The oral RfD for pyrene is listed in IRIS, at 3E-2 mg/kg/day. This is based on an oral mouse subchronic bioassay, with critical effects manifesting as kidney toxicity. Renal tubule pathology and decreased kidney weights were noted, with a NOAEL of 75 mg/kg/day, and a LOAEL of 125 mg/kg/day. Uncertainty factor is 3000, and confidence in the RfD is therefore low.

As for potential carcinogenicity of pyrene, EPA has assigned this PAH to Group D (not classifiable as to human carcinogenicity). No carcinogenic slope factor has been developed for pyrene.

Phenanthrene: CASRN 85-01-8

At this time, no oral RfD has been developed for phenanthrene.

In terms of likelihood for this PAH to be carcinogenic, EPA has classified phenanthrene as Group D (not classifiable as to human carcinogenicity), due to lack of adequate human and animal data.

Benzo(g,h,i)perylene: 1,12-benzoperylene; CASRN 191-24-2

At this time, no oral RfD has been developed for this PAH.

As for carcinogenic potential of this compound, EPA has placed it in Group D (not classifiable as to human carcinogenicity). This is due to lack of adequate human and animal data. No relative potency factor has been developed for this PAH.

NAPHTHALENES:

Naphthalene: CASRN 91-20-3

Naphthalene is also known as “tar camphor”, and is found naturally in fossil fuels. It is also produced from burning wood, or tobacco. The major industrial products made from naphthalene are moth repellants (“moth balls”). (Most modern mothball and deodorant preparations now contain p-dichlorobenzene, which has replaced the more-toxic naphthalene. However, “old-fashioned” preparations may still contain naphthalene). Naphthalene is also used in the manufacture of resins, dyes, leather, tanning agents, and the commonly used carbamate insecticide, carbaryl.

Naphthalene does not typically bioaccumulate in the tissues of animals or fish, but it can remain in the body for as long as several weeks before it is completely broken down (mainly by the liver) and excreted. Naphthalene has an extensive number of metabolites—more than 30 have been identified in the rat and mouse. It is excreted primarily via the urine, but may also be found in the stool, as well as in breast milk after significant exposures.

Acute exposures to large amounts of naphthalene may result in hemolytic anemia, in which red blood cells are destroyed/damaged. This has been observed in humans, especially children, after ingestion of naphthalene-containing mothballs or deodorant blocks. Anemia has also occurred in infants wearing diapers after storage in mothballs. Persons who are deficient in glucose-6-phosphate dehydrogenase activity, are at increased risk for developing hemolytic anemia from acute exposure to naphthalene.

In rodents and other laboratory animals, cataract formation has been long noted to occur after exposure to large acute doses of naphthalene. Evidence from rats and rabbits suggests that this ocular toxicity is due to the formation of a liver metabolite, 1,2-dihydroxy naphthalene, which is then enzymatically converted in the eye to 1,2-napthoquinone which then reacts with eye proteins, causing the damage. In animal studies, another well-known target tissue for the effects of high doses of naphthalene is the lung; specifically the nonciliated bronchiolar epithelial cells (“Clara cells”).

The oral RfD for naphthalene is 2E-2 mg/kg/day, based on a 1980 subchronic oral rat study, with a critical toxic endpoint of decreased mean terminal body weight in males. NOAEL for the study was 100 mg/kg/day (which--because the study was a subchronic one rather than a full chronic study--was subsequently duration-adjusted to 71 mg/kg/day). LOAEL was 200 mg/kg/day, which was likewise duration-adjusted to 142 mg/kg/day. An uncertainty factor of 3000 is used in calculating the RfD, which represents separate uncertainty factors of 10 for extrapolation to humans from rats, 10 to protect sensitive human populations, 10 to extrapolate from subchronic to chronic exposure, and 3 for database deficiencies including the lack of chronic oral exposure studies and 2-generation reproductive toxicity studies. Confidence in the RfD is low.

As for likelihood of carcinogenicity, EPA has classified naphthalene in Group D (not classifiable as to human carcinogenicity), because of the lack of adequate human and animal data.

However, in February 2001, the National Toxicology Program (NTP) has completed and published a 2-year rodent inhalation of naphthalene. Results of this inhalation study show clear evidence of carcinogenic activity. At this time, however, EPA has not reviewed this information as part of its IRIS carcinogenesis assessment process for this compound.

Methyl-naphthalene: 1-Methylnaphthalene; CASRN 90-12-0

1-methylnaphthalene is utilized in the manufacture of dyes, resins and other chemicals. Along with naphthalene and 2-methylnaphthalene, it is also present in materials like wood and cigarette smoke, tar, asphalt, and some hazardous waste. At this time, no RfD has been established for 1-methyl-naphthalene.

Likewise, EPA has not evaluated this compound in terms of likely carcinogenic potential.

2-Methyl-naphthalene: Beta-methylnaphthalene; CASRN 91-57-6

The uses and occurrence of 2-methylnaphthalene are similar to those reported for 1-methylnaphthalene above. In addition, 2-methylnaphthalene is also used in the production of Vitamin K.

At this time, no RfD has been established for 2-methyl-naphthalene.

Likewise, EPA has not evaluated this compound in terms of likely carcinogenic potential.

2-Chloronaphthalene: Beta-chloronaphthalene; CASRN 91-58-7

The oral RfD for 2-Chloronaphthalene is 8×10^{-2} mg/kg/day. This is based on a mouse subchronic oral gavage study, with liver enlargement, abnormal appearance, and dyspnea as critical toxic effects. NOAEL from these data was 250 mg/kg/day, with a LOAEL of 600 mg/kg/day. The uncertainty factor for the RfD is 3000, which reflects factors of 10 each for inter- and intraspecies conversion, 10 for the use of a subchronic study to derive the chronic RfD, and 3 to account for the lack of reproductive /developmental and chronic toxicity data. Confidence in the RfD is thus low.

At this time, EPA has not evaluated 2-chloronaphthalene for likelihood of carcinogenic potential.

METALS:

Aluminum: CASRN 7429-90-5.

Aluminum is a widely distributed component of the earth's crust and is frequently found in the environment. Aluminum may enter the environment either through natural processes or human activity, such as coal combustion or aluminum mining or smelting (ATSDR, 1997). Aluminum metal is widely used in such products as cooking utensils, machine parts, food and beverage containers and structural components of buildings and aircraft. Aluminum alloys and compounds are also used in products such as antacids, deodorants, dental materials, and drinking water additives. Due to the ubiquitous nature of aluminum in the environment, aluminum is also found in food and drinking water. The typical dietary intake of aluminum from food and drinking water is approximately 10 mg/day. Aluminum does not appear to be an essential dietary element. Exposure to aluminum may be assessed through urinary measurements.

Absorption of aluminum across the GI tract appears to be fairly low, perhaps less than 1 percent (ATSDR, 1997). However, the degree to which aluminum is absorbed will depend on material with which it was ingested and the nutrient status of the individual. Once absorbed, aluminum is distributed throughout the body with about half the body burden found in the skeleton (ATSDR, 1997). Excess aluminum is eliminated rapidly from the body, with most of the absorbed dose eliminated in the urine (ATSDR, 1997).

Aluminum toxicity after oral exposure has not been conclusively observed in humans (ATSDR, 1997). Joint pain and skeletal effects have been reported in persons exposed to high levels of aluminum, but these have generally been individuals with impaired kidney function who are unable to efficiently excrete aluminum in urine. Elevated brain concentrations of aluminum are also associated with Alzheimer's disease, although it is unclear whether elevated brain aluminum is a cause or symptom of the disease. In experimental animals, studies have also linked aluminum exposure to toxic effects in the central nervous system. Exposure of pregnant laboratory animals to aluminum has led to developmental problems in some studies and no problems in others. Developmental problems in humans have only been observed in babies with impaired renal function, in which brain and skeletal damage were noted. This group therefore represents a small but significant sensitive subpopulation at elevated risk from aluminum exposure.

Non-Cancer Health Risks: NCEA has established a provisional oral RfD of 1E+0 mg/kg/day, for aluminum. This is based on a LOAEL of 100 mg/kg/day, with a critical effect of minimal neurotoxicity in the offspring of mice. The co-critical studies used in establishing this LOAEL are the papers by Donald et al (1989), and Golub et al (1995), who dosed mice with dietary aluminum lactate (insoluble aluminum) during gestation and lactation. The neurotoxicity associated with

this LOAEL is consistent with LOAELs from other developmental and subchronic neurobehavioral studies in mice and rats which used higher dietary dosages of aluminum lactate or aluminum chloride. The LOAEL is considered minimal because the results of the

post-weaning neurobehavioral test battery indicate that performance deficits may be marginal. NCEA has applied an uncertainty factor of 100 to this suggested RfD (3 for the use of a minimal LOAEL, 10 for interspecies extrapolation, and 3 for interhuman variability). Confidence in the co-critical studies is low.

EPA IRIS has thus far not established an oral RfD for aluminum due to the lack of clear animal or human data on aluminum toxicity. An RfD does exist for aluminum phosphide (a fumigant) but the toxicity addressed by the RfD stems from the phosphine gas liberated from this compound rather than from the aluminum. Similarly, the ATSDR declined to establish a minimum risk level (MRL) for aluminum due to the lack of evidence of adverse effects in humans and the overlap of NOAEL and LOAEL levels for neurological effects in animal studies. ATSDR noted that, using a LOAEL value with appropriate uncertainty factors, a MRL would be determined that is 10 times lower than the typical human dietary intake.

Carcinogenesis: The US EPA has not classified aluminum as to carcinogenicity (IRIS, 2000). Increased cancer incidence has been noted in workers in the aluminum industry, but this is believed to be due to exposure to other chemicals (e.g., PAHs) and not to aluminum. There do not appear to have been any adequate studies of the carcinogenic potential of aluminum in experimental animals.

NCEA suggests that aluminum be given a qualitative weight-of-evidence as Group D (not classifiable as to human carcinogenicity), in accordance with the agency's proposed guidelines for carcinogenic risk assessment.

References

1. ATSDR (Agency for Toxic Substances and Disease Registry). 1997. Toxicological Profile for Aluminum (Update).
2. IRIS 2000. Integrated Risk Information System (On-line database)

Antimony: CASRN 7440-36-0

Antimony belongs chemically to the same periodic group as arsenic, and like arsenic, may be either trivalent or pentavalent. Antimony is a metal with numerous industrial uses, most of which are the result of antimony being mixed with various other metals to form alloys, or with oxygen to form antimony oxide. It is used in lead storage batteries, bearing metals, castings, pewter, sheet and pipe metal, and solder. The oxide is used in textiles and plastics to prevent them from catching fire. Historically, antimony was used medicinally as an anti-parasite agent, in treating leishmaniasis and schistosomiasis.

Like other metals, antimony occurs naturally in the environment. The ATSDR indicates that the normal background level of antimony in soil is less than 1 ppm, with high background being about 9 ppm. At hazardous waste sites and industrial sites where antimony wastes are processed, soil levels as high as 2550 ppm have been found. Exposure of the general population is largely

from food, ATSDR indicates that the average daily intake of antimony via the human diet is about 5 micrograms per day.

The metabolism,—and in the very general sense, the toxicity-of antimony is somewhat similar to that of arsenic. It is absorbed slowly from the gut, and many antimony compounds are gastrointestinal irritants. Workers in antimony smelting and ore processing have noted various symptoms. Acute inhalation exposures result in irritation to the nose, pharynx and trachea, and can culminate in more serious respiratory problems leading to obstructive lung disease, pneumoconiosis and emphysema. Antimony-containing compounds can also affect the heart; this is evidenced from fatalities in certain patients who died from cardiotoxicity following treatment with antimony-based drugs. Workers with sufficient chronic exposure and/or sensitivity to antimony can also suffer transient skin eruptions, known as “antimony spots”.

IRIS lists an oral RfD of 4×10^{-4} mg/kg/day, for antimony. This is based on a 1970 chronic dosing study of rats given potassium antimony tartrate in water. LOAEL from this study was 0.35 mg/kg/day. No NOAEL was derived from this study. Critical toxicologic endpoints were longevity, and changes in blood glucose and cholesterol levels. Uncertainty factor is 1000, and confidence in the RfD is low.

At this time, EPA has not evaluated antimony in terms of carcinogenic potential.

Arsenic: CASRN 7440-38-2

This overview of the potential for human exposure to arsenic is provided from the current Agency for Toxic Substances and Disease Registry (ATSDR) publication in addition to other citations. Specific discussion about toxicity values used to characterize health risks potentially associated with exposure to inorganic arsenic is based on information provided in the U.S. Environmental Protection Agency (USEPA) Integrated Risk Information System (IRIS). Additional discussions of the current basis (i.e. skin cancer) for characterizing cancer risks were drawn from the reports prepared by the National Research Council and recent USEPA analyses of human epidemiological data.

Exposures to Arsenic: Arsenic is a common minor element in the earth's crust and is the 20th most abundant. Arsenic-bearing minerals are particularly concentrated in rock associated with metallic ore deposits, especially hydrothermally formed ore. In the Pacific Northwest, there are many reports of waterborne arsenic found in connection with historical mining of ore deposits, geothermal hot springs or areas where arsenic-rich igneous and sedimentary rocks have come in contact with ground water or surface water. While arsenic is released to the environment from natural sources such as these, releases resulting from man-made activities also exist. Examples of such man-made activities include mining, smelting, pesticide application, coal combustion, wood combustion, waste incineration and emissions resulting from refinement or combustion of crude oil or hydrocarbon fuels.

Low levels of arsenic are present in all environmental media and all living organisms. Arsenic exists in many chemical forms (chemical species), both organic and inorganic. These chemical species have varying toxicities ranging from practically non-toxic to very toxic. In humans, an ingested single dose of highly purified inorganic arsenic ranging from 50-100 milligrams or greater may result in acute poisoning which may be fatal. Environmental exposures are expected to be much lower. Concentrations in air in remote locations (away from human releases) range from 1 to 3 ng/m³, while concentrations in urban areas may range from 20 to 100 ng/m³. Concentrations in seawater are relatively homogeneous ranging between 1.5 to 5.0 ug/L with an average of 1.7 ug/L. Concentrations in freshwater rivers and lakes vary widely and are dependent on the available minerals subject to transport. The average arsenic concentration in freshwater is approximately 1.7 ug/L with most waters ranging from 0.1 to 10 ug/L. Natural levels of arsenic in soil usually range from 1 to 40 ppm.

For most people, diet is the largest source of exposure. Arsenic is found in many foods at concentrations usually ranging from 20 to 140 ppb (total arsenic). However, total arsenic concentrations in rice, fish, shellfish and seaweeds may be ten times or more higher. The U.S. Food and Drug Administration which monitors the safety of the U.S. food supply states that the majority of dietary exposure to total arsenic is derived from seafood products. The identity of the chemical species of arsenic in seafoods is currently an area of active research and rapidly advancing knowledge. Certain lifestyle exposures may also be important sources of exposure such as the use of non-traditional medicinals, tobacco smoke, wine and hobby or artist's supplies. In regards to medicinals, for the last few centuries, inorganic arsenic has been used for a variety of health problems, particularly for asthma, rheumatic fever and skin conditions. Analyses of some present day herbal medicinals indicate concentrations of arsenic.

As mentioned above, the chemical species of arsenic have toxicities which range from very toxic to virtually non-toxic. Organic arsenic species (those with carbon molecules bonded to the arsenic) are less toxic and the inorganic arsenic species (those in which arsenic atom has a 3+ or 5+ charge and no carbon molecules; denoted as As³⁺ or As⁵⁺, respectively) are more toxic. Organic arsenic species such as arsenobetaine (AB), arsenocholine (AC), arsenosugars (AS), dimethylarsenic (DMA) and monomethylarsenic (MMA) predominate in foods. Because AB, AC and MMA are readily absorbed from the human digestive tract and excreted in urine rapidly and unchanged, these arsenic species are considered virtually non-toxic. In contrast, AS are apparently metabolized to DMA which is then excreted in urine. The USEPA has classified DMA as a category B2 carcinogen (probable human carcinogen based on sufficient animal, but insufficient human evidence) based on tumors in rodents.

In freshwater and marine water fish, shellfish and seaweeds, organic arsenic species may account for 90 to 100 percent of the total arsenic. Recognizing the significance of differentiating the inorganic versus organic content in seafoods, twenty years ago or more investigators in Europe, Australia, Asia and North America published analytical methods and their results. In recent years there has been concern about interconversion of the arsenic species throughout the analytical process, achieving reproducible and efficient recovery of all species, and loss of arsenic concentrations during samples preparation. Recently published reports reaffirm previous findings

of relatively low inorganic arsenic concentrations in finfish. In contrast, chemistry analytical methods are not adequate for determining accurate concentrations of AS and DMA in seafood.

Inorganic arsenic species taken up and retained by the body are initially distributed in greatest quantities to liver and kidney. Later on, as in chronic exposure, such inorganic arsenic tends to become biodistributed preferentially to highest concentrations in ectodermally-derived tissues such as hair, nails, and skin. Hair analysis is utilized by some clinicians as an rough indicator of overall inorganic arsenic body burden.

Toxicity of Inorganic Arsenic-Chronic Non-Cancer Health Effects: Effects in humans due to arsenic contaminated drinking water have been observed worldwide. Hence, toxicological information for development of the RfD is based on human exposures. The most distinguishing adverse effects associated with chronic ingestion of arsenic include skin changes and damage to the vascular system. Severe cases of chronic exposure result in a disorder known as “blackfoot disease”, which is a progressive loss of circulation in the extremities ultimately leading to gangrene. The “blackfoot disease endemic area” in Taiwan had arsenic concentrations in well water ranging from 0.01 to 1.82 mg/L (Bates et al., 1992). The localized nature of blackfoot disease may be due to the presence of other substances consumed in drinking water (fluorescent substances) that are possible confounders or have caused synergistic effects (ATSDR, 1998; USEPA, 2000). While blackfoot disease has not been reported elsewhere in the world, other less severe signs of vascular injury (such Reynaud’s disease) have been reported in other areas of the world). Hyperkeratosis, hyperpigmentation and skin cancer are also distinguishing adverse effects of arsenic exposure, and have been observed in populations in Taiwan, Mexico, India and Chile who consumed drinking water with high levels of arsenic (greater than 0.2 mg/L). Hyperkeratosis and hyperpigmentation appear to be the earliest observable signs of chronic exposure.

Evidence of reproductive or developmental toxicity in humans is limited and inconclusive. The available studies in humans do not provide conclusive evidence that ingestion of arsenic, at the level usually encountered in drinking water, causes developmental toxicity. Studies in laboratory animals suggest that arsenic exhibits developmental toxicity (reduced birth weight, fetal malformations, and increased fetal mortality) at high levels of exposure (20 to 70 mg/kg-day, orally). The data suggest that inorganic arsenic does not pose a significant risk of developmental toxicity except at maternally toxic levels (ATSDR, 1998).

Genetic factors and age may distinguish human subpopulations that are sensitive to inorganic arsenic exposure, especially in their ability for metabolism. Metabolism involves processes associated with absorption into the body, distribution within the body, conversion of inorganic arsenic to another species of arsenic and elimination of arsenic from the body. Conversion of inorganic arsenic to an organic species enhances the water solubility of arsenic and facilitates urinary excretion. Theoretically, individuals with impaired capacity to produce water-soluble methylated arsenic metabolites may be at greater risk of adverse effects from arsenic exposure. Therefore, individuals with dietary deficiencies, impaired liver or kidney function may be more sensitive to adverse effects from arsenic exposure (ATSDR, 2000). Recently, it has been discovered that some methylated arsenic metabolites produced in the human body are more toxic

then the initially ingested arsenic (Gregus et al, 2000; Aposhian et al 2000). One study in Finland suggests that children have lower arsenic-methylating ability than adults (Concha et al 1998). Hence, the overall significance of methylation of arsenic by the human body is still being worked out.

Development of the Non-cancer Oral RfD for inorganic arsenic: IRIS lists an oral RfD of 3×10^{-4} mg/kg/day, for arsenic. Uncertainty factor is 3, and confidence in the RfD is medium. The Oral Reference Dose (RfD) is based on the occurrence of hyperpigmentation and hyperkeratosis, and vascular complications observed in the Taiwanese population ingesting elevated levels of arsenic in drinking water. The NOAEL was calculated to be 0.0008 mg/kg per day. An uncertainty factor of 3 is applied to account for both the lack of data to preclude reproductive toxicity as a critical effect and to account for some uncertainty in whether the NOAEL of the critical study accounts for all sensitive individuals. The oral RfD for arsenic is 0.0003 mg/kg per day. According to USEPA, strong scientific arguments can be made for various values within a factor of 2 or 3 of the currently recommended RfD value, i.e., 0.0001 to 0.0008 mg/kg per day. The RfD value used in this assessment was 0.0003 mg/kg per day.

Review of Cancer Health Effects: In terms of carcinogenicity, IRIS lists arsenic as Group A (known human) carcinogen. The oral carcinogenic slope factor for arsenic is 1.5×10^0 mg/kg/day. The oral cancer slope factor for estimating excess the incidence of lifetime cancer risks due to inorganic arsenic is based on skin cancer observed in Taiwanese populations ingesting elevated levels of inorganic arsenic in drinking water. Doses were converted to equivalent doses for U.S. males and females based on differences in body weights and differences in water consumption. It was assumed that skin cancer risk in the U.S. population would be similar to the Taiwanese population. It should be noted that USEPA's assessment is based on prevalence of skin cancer rather than mortality. The oral cancer slope factor is $1.5 \text{ (mg/kg-day)}^{-1}$.

Human exposures to inorganic arsenic in drinking water are also associated with cancers of the internal organs (lung, bladder, prostate, liver, kidney). The USEPA has not yet revised the oral cancer slope factor to account for the occurrence of internal cancers. However prior to the publishing the June 2000 proposal to lower the arsenic drinking water standard, the USEPA recently evaluated human epidemiological data for the incidence of bladder and lung cancer (65 FR 38888 and 65 FR 63027). The evaluations found the incidence of these cancers to be in the same range as the incidence for skin cancer (within a factor of 2 to 4).

As noted above in the overview, the extrapolation model assumes that the cancer response which occurs at higher exposures is the same at lower exposures. For inorganic arsenic, some scientific evidence suggests that this may be a faulty assumption and at low exposures the human body does not have an adverse cancer-producing response (USEPA 1997). However, no data exist to identify this theoretical exposure level.

References

1. Concha G, Nermell B, Vahter M 1998. Metabolism of inorganic arsenic in children with chronic high arsenic exposure in northern Argentina. Environmental Health Perspectives 106:355-359.
2. Gregas Z, Gyurasics A, Csanaky I 2000. Biliary and urinary excretion of inorganic arsenic: monomethylarsonous acid as a major biliary metabolite in rats. Toxicological Sciences 56:18-25.
3. Aposhian HV, Gurzau ES, Le XC, Gurzau A, Healy SM, Lu X, Ma M, Yip L, Zakharyan RA, Maiorino RM, Dart RC, Tircus MG, Gonzalez-Ramirez D, Morgan DL, Avram D, Aposhian MM 2000. Occurrence of monomethylarsonous acid in urine of humans exposed to inorganic arsenic. Chem Res Toxicol 13(8):693-697.
3. ATSDR toxicological profile, 2000
4. Brooke PJ and Evans WH 1981. Determination of total inorganic arsenic in fish, shellfish and fish products. Analyst 106:514-520.
5. Broughton WA 1942. Inventory of mineral properties in Snohomish County, Washington: Washington Dept. of Conservation and Development Report of Investigations, no. 6, 64 pages, as cited in "Seasonal study of arsenic in ground water; Snohomish County, Washington", Washington Dept. of Health, June 1991.
6. Buchet JP, Pauwels J, Lauwerys R 1994. Assessment of exposure to inorganic arsenic following ingestion of marine organisms by volunteers. Environmental Research 66:44-51.
7. Concha G, Nermell B, Vahter M 1998. Metabolism of inorganic arsenic in children with chronic high arsenic exposure in northern Argentina. Environmental Health Perspectives 106:355-359.
8. Creceluis EA and Apts CW 1985. Concentration and speciation of arsenic in flatfish and crabs collected from Commencement Bay. Report prepared for Tacoma-Pierce County Health Dept, Tacoma, Washington, by Battelle Pacific Northwest Laboratories Marine Research Laboratory, Sequim, Washington, February 1985.
9. FR, 2000. "National Primary Drinking Water Regulations; arsenic and clarifications to compliance and new source contaminants monitoring; proposed rule" 65 FR 38888, June 22, 2000 and "National Primary Drinking Water Regulations; arsenic and clarifications to compliance and new source contaminants monitoring; notice of data availability" 65 FR 63027, October 20, 2000.
10. Gregas Z, Gyurasics A, Csanaky I 2000. Biliary and urinary excretion of inorganic arsenic: monomethylarsonous acid as a major biliary metabolite in rats. Toxicological Sciences 56:18-25.
11. Koch I, Feldmann J, Wang L, Andrewes P, Reimer KJ, Cullen WR 1999 Arsenic in the Meager Creek hot springs environment, British Columbia, Canada. Science of the Total Environment 236:101-117.
12. Koch I, Reimer KJ, Beach A, Cullen W. 2000 Arsenic speciation in fresh water fish and bivalves. Proceedings of the 4th International Conference on Arsenic Exposure and Health Effects, San Diego, CA, June 18-22.
13. Lai V W-M, Cullen WR, Ray S 1999 Arsenic speciation in scallops. Marine Chemistry 66:81-89.
14. Lawrence JF, Michalik P, Tam G, Conacher HBS 1986. Identification of arsenobetaine and arsenocholine in Canadian fish and shellfish by HPLC with atomic absorption detection and confirmation by fast atom bombardment mass spectrometry. Journal of Agricultural Food Chemistry 34:315-319.

15. Le XC, Cullen WR and Reimer KJ 1994a. Human urinary arsenic excretion following one time ingestion of arsenosugars present in seaweed and arsenobetaine in crabs and shrimp. Clinical Chemistry 40:617-625.
16. Le SXC, Cullen WR, Reimer KJ 1994b. Speciation of arsenic compounds in some marine organisms. Environmental Science and Technology 28(9):1598-1604.
17. Lund G 1973. Separation and analysis of organic bound and inorganic arsenic in marine organisms. J Sci Fd Agric 24:1021-1027.
18. Maher WA 1983. Inorganic arsenic in marine organisms. Inorganic arsenic in marine organisms 14(8):308-310.
19. McKiernan JW, Creed JT, Brockoff CA, Caruso JA, Lorenzana RM 1999. A comparison of automated and traditional methods for the extraction of arsenicals from fish. Journal of Analytical Atomic Spectrometry 14:607-613.
20. Micromedex, 1998. Poisindex: Arsenic.
21. Mitchell-Heggs CAW, Conway M, Cassar J 1990. Herbal medicine as a cause of combined lead and arsenic poisoning. Human and Experimental Toxicology 9:195-196.
22. Mok W-M and Wai CM 1990. Distribution and mobilization of arsenic and antimony species in the Coeur d'Alene River, Idaho. Environmental Science and Technology 24:102-108.
23. Muñoz O, Devesa V, Suñer MA, Vélez D, Montoro R, Urieta I, Macho ML, Jalón M 2000. Total and inorganic arsenic in fresh and processed fish products. Journal of Agricultural and Food Chemistry 48:4369-4376.
24. National Research Council 1999. Arsenic in Drinking Water. Subcommittee on Arsenic in Drinking Water, Committee on Toxicology. National Academy Press, Washington, DC.
25. Ong E-S, Yong Y-L, Woo S-O 1999. Determination of arsenic in traditional Chinese medicine by microwave digestion with flow injection-inductively coupled plasma mass spectrometry. Journal of AOAC International 82(4):963-967.
26. Shinagawa A, Shomi K, Yamanaka H, Kikuchi T 1983. Selective determination of inorganic arsenic III, V and organic arsenic in marine organisms. Bulletin of the Japanese Society of Scientific Fisheries 49(1):75-78.
27. Stigler JB, de Haan HPM, Guicherit R, Dekkers CPA, Daane ML 2000. Determination of cadmium, zinc, copper, chromium and arsenic in crude oil cargoes. Environmental Pollution 107:451-464.
28. Tamaki S and Frankenberger WT 1992. Environmental biochemistry of arsenic. Reviews of Environmental Contamination and Toxicology 124:79-109.
29. Tao S-H and Bolger PM 1998. Dietary arsenic intakes in the United States: FDA total diet study, September 1991 - December 1996. Food Additives and Contaminants 16 (11):465-472.
30. USEPA 1997 Report on the expert panel on arsenic carcinogenicity: review and workshop. National Center for Environmental Assessment, U.S. EPA, Washington, DC, August 1997.
31. USEPA 1994. Carcinogenicity peer review of cacodylic acid. Health Effects Division Carcinogenicity Peer Review Committee, Office of Prevention, Pesticides and Toxic Substances, Washington, DC.
32. U.S.Geological Survey 2000. Arsenic in ground water resources of the United States. USGS report WRIR 99-4279.

Barium: CASRN 7440-39-3

Barium is a metal which occurs naturally in the earth's crust. It is used industrially in the preparation of rubber, glass, tile, bricks, paints, etc. Barium is also used by the oil and gas industry to make drilling muds. With respect to barium toxicity, solubility is everything. In clinical settings barium sulfate, which is not soluble in the body, is sometimes injected into the bloodstream prior to X-Ray diagnosis, to enhance the visual depth of the images seen. But should soluble barium salts like barium chloride be used in this manner, death from heart failure can be instantaneous.

Barium is found at low levels in most soils and most food substances. It can be accumulated by aquatic organisms. Excess exposures to barium are usually workplace-related, or from the ingestion of contaminated water. Environmental levels also increase via the mining, refining and production of barium compounds, and from burning fossil fuels.

The oral RfD for barium is 7E-2 mg/kg/day. Previous investigations in research animals—both acute and chronic—have demonstrated the potential for hypertension to develop after high barium exposures. Based on these reports, lower dose human studies were undertaken to examine potential effects of barium exposure on blood pressure, EKG, and serum and urinary markers of toxicity. Although these studies unearthed no evidence of barium-induced human toxicity, an “adjusted NOAEL” of 0.21 mg/kg/day was developed. This dose, along with the findings of kidney effects seen from subchronic and chronic rat studies by the National Toxicology Program (NTP), serves as the basis for deriving the RfD, and is consistent with EPA's RfD methodology. An uncertainty factor of 3 is used to develop the RfD, to account for the lack of adequate developmental toxicity studies, and for the lack of data exploring potential differences between adults and children. Confidence in the RfD is medium.

In terms of the likelihood of barium being a carcinogen, adequate chronic oral exposure studies in mice and rats have not shown carcinogenic effects. EPA has thus classified barium in Group D (not classifiable as to human carcinogenicity.) However the lack of adequate inhalation exposure studies precludes the assessment of the carcinogenic potential of inhaled barium at this time.

Beryllium: CASRN 7440-41-7

Beryllium is one of the lightest metals known, and is found naturally in the mineral rock bertrandite, and also in beryl (the source of emerald and aquamarine). Although it occurs naturally in the earth's crust, its major emission source into the environment is via burning fossil fuels, especially coal, which releases beryllium containing particles into the air. It has important uses in the electronic and defense industries, especially in situations which require lightweight metals resistant to corrosion and fatigue. Beryllium oxide is also utilized in various high-technology materials which require resistance to heat.

Exposure to beryllium produces a wide range of health effects including lesions and sensitization. ATSDR indicates that a small percentage of the population is hypersensitive to beryllium. Although information about the oral toxicity of beryllium in humans is lacking in the literature, inhaled beryllium is extremely toxic to the lung. Chronic beryllium disease (berylliosis) in

exposed workers is well documented, involving a progressive pulmonary granulomatosis. Beryllosis has a long latency period, and ATSDR indicates that even low and seemingly trivial inhalation exposures to beryllium may be important in causing it. Documented cases in the literature even point out occasional examples of beryllosis resulting from secondary contamination (e.g., a family member's exposure to beryllium from a worker's clothing).

The oral RfD for beryllium is 2×10^{-3} mg/kg/day, based on a 1976 chronic dietary study in dogs, with the critical toxicological endpoint being the development of gastrointestinal lesions. Because a LOAEL and/or NOAEL were not clearly identifiable from the design and course of this study, dose-response modeling of the data was undertaken to derive a benchmark dose (BMD) for beryllium. A BMD10 (the lower 95% confidence limit on the dose from the maximum likelihood estimate (MLE) of a 10% relative change) of 0.46 mg/kg/day (MLE = 1.4 mg/kg/day) was derived for this lesion and used for further quantitation in this assessment. The uncertainty factor for the RfD is 300, and reflects a tenfold factor for interspecies differences, another tenfold factor for intraspecies variation, and a factor of 3 for deficiencies in the database. Confidence in the RfD, and in the supporting database, is low to medium.

In terms of carcinogenicity, EPA has classified beryllium in Group B1 (Probable Human Carcinogen), by inhalation. Studies regarding the potential carcinogenicity of ingested beryllium to humans were not available. ***For purposes of this report, beryllium will not be considered to be a potential carcinogen via the oral route of exposure.***

Cadmium: CASRN 7440-43-9

Cadmium is a metallic element that is naturally present at low levels in rocks and soils. Cadmium is introduced into the environment by both natural processes or industrial activities such as combustion of fossil fuels or metal mining and refining (ATSDR, 1997). Cadmium is found in a variety of products including nickel-cadmium batteries, pigments in paints, plastics and ceramics, polyvinyl chloride (PVC) products (as a stabilizer) and in various metal alloys (ATSDR, 1997). Foodstuffs typically contain small amounts of cadmium with the highest amounts in leafy vegetables and potatoes (ATSDR, 1997). The typical daily intake of cadmium from food is about 30 ug/day (ATSDR, 1997). Tobacco and cigarette smoke also contain significant amounts of cadmium and the daily intake of cadmium may be increased an additional 1 to 3 ug/day for each pack of cigarettes smoked (ATSDR, 1997). Cadmium does not appear to be an essential nutrient.

Unlike many other toxic metals, toxic effects from cadmium are more straightforward, since cadmium does not combine with organic ligands to form organometallic compounds. Exposure to cadmium may be evaluated by looking at cadmium levels in biological matrices such as blood, hair, nails and urine.

Studies in humans have indicated that the amount of cadmium absorbed into the body after oral exposure ranges from about 5 to 10 percent (ATSDR, 1997). Iron status affects cadmium absorption and persons with iron deficiency may absorb more cadmium. After absorption, cadmium is distributed throughout the body with the largest accumulation in the liver and kidney

(ATSDR, 1997). Cadmium is excreted very slowly once it is deposited at these tissue sites, with elimination half-times on the order of years rather than days or weeks. Cadmium is a classic lifetime cumulative poison, accumulating in the kidney throughout life.

Accordingly, chronic exposure leads to renal accumulation and kidney degeneration (ATSDR, 1997). It also causes bones to become brittle and easily damaged. These effects have been reported in human populations with elevated levels of dietary cadmium due to high levels of cadmium in soils. Similar effects have been noted in experimental animals. Chronic cadmium exposure may also interfere with iron uptake and has lead to anemia in experimental animals. In animals, chronic exposure to cadmium has also lead to neurological impairments and a limited amount of evidence for such effects have also been observed in human populations (ATSDR, 1997). Exposure of pregnant laboratory animals to cadmium has resulted in some developmental problems, particularly CNS development.

Non-Cancer Health Risks: EPA has established two oral RfDs for cadmium: For cadmium in food, the RfD is 1E-3 mg/kg/day. For cadmium acquired from drinking water and potable water sources, the RfD is 5E-4 mg/kg/day, respectively. The two values are based on the different GI absorption of cadmium from food and water. ***For purposes of this report, which assesses risk from ingesting fish tissue, the RfD for cadmium will be assumed to be 1E-3. mg/kg/day.***

Toxicological data for establishing the respective RfDs come from an EPA analysis of human data (US EPA, 1985) which found that a kidney concentration of 200 ug/gm was the highest renal level not associated with adverse effects (specifically proteinuria; as evidenced by elevated beta-2 microglobulin in urine, etc.) NOAEL (from water-derived exposure) was 0.005 mg/kg/day. NOAEL (from food-derived exposure) was set at 0.01 mg/kg/day. Using a toxicokinetic model, a safe intake level of 0.01 mg Cd/kg/day from food was then estimated. The estimated NOAEL was divided by an uncertainty factor of 10 to account for sensitive subgroups in the human population. Confidence in the RfD is high due to the large amount of human and animal toxicology data available for this compound.

Carcinogenesis: The EPA has determined that cadmium is a probable human carcinogen (Class B1; IRIS, 2000), by the inhalation route. This is largely based on inhalation studies in occupationally exposed populations and on inhalation and oral dose studies in experimental animals.

Although there are sufficient experimental and epidemiologic data to derive inhalation unit risk values for cadmium, there does not appear to be sufficient evidence to derive oral slope factors. As a consequence, the carcinogenicity of cadmium following oral exposure remains controversial.

Accordingly, no oral carcinogenicity slope factor has been calculated for cadmium. ***For purposes of this report, cadmium will not be considered to be carcinogenic by the oral route of exposure.***

References

1. ATSDR (Agency for Toxic Substances and Disease Registry). 1997. Toxicological Profile for Cadmium.
2. IRIS 2000. Integrated Risk Information System (On line database)
3. U.S. EPA. 1985. Drinking Water Criteria Document on Cadmium. Office of Drinking Water, Washington, DC. (Final draft)

Chromium (+6): CASRN 18540-29-9

Chromium exists in two possible valence states (Chromium +3, and Chromium +6) Trivalent chromium (Cr+3) is regarded to be an essential nutrient, while Hexavalent Chromium (Cr+6) is a known human carcinogen, by inhalation.

For purposes of this report, all chromium reported in the various analyses as “total chromium” will be considered to be Cr+6. This is no doubt an overstatement of the actual risk, because it is unlikely that all of the chromium detected in the various fish samples would actually be the Cr+6 species.

Hexavalent Chromium (Cr +6) has an oral reference dose of $3\text{E-}3$ mg/kg/day. This RfD is based on a one-year drinking water study in rats, from 1958. The NOAEL from this study was assumed to be 2.5 mg/kg/day, adjusted from a dose of 25 mg/l of chromium administered daily as potassium dichromate. Although the rats did abruptly accumulate significant amounts of excess chromium during the study, they did not exhibit noticeably significant adverse effects at the doses administered. From this it was assumed that apparently the rodent tissues can accumulate considerable quantities of chromium before pathological changes result. Accordingly, no LOAEL was developed for chromium on the basis of these data. Uncertainty factor is 300. This includes

two tenfold factors to account for both the expected interhuman and interspecies variability in the toxicity of the chemical in the absence of specific data, and an additional factor of 3 to compensate for the less-than-lifetime exposure duration of the principal study. An additional modifying factor of 3 is also used, to account for concerns raised by a more recent study of humans exposed to hexavalent chromium in China. This (1987) Chinese study suggests that humans may suffer gastrointestinal effects following exposure to levels of around 20 ppm hexavalent chromium in drinking water. Confidence in the RfD is low.

IRIS lists Cr+6 as a Group A (known human) carcinogen, by inhalation. Because of this, no oral carcinogenic slope factor has been calculated for Cr+6.

Cobalt: CASRN 7440-48-4

Cobalt is a relatively rare metal, whose principal source is as a by-product of other metals, chiefly copper. It is used in permanent magnets, and in high-temperature alloys. Cobalt salts are useful in paint dryers, as catalysts, and in the manufacture of various pigments.

Cobalt is a metal which has both beneficial and deleterious effects, depending on the exposure route, dose, and the type of biochemical /pharmacological pathway with which these doses and exposures are associated. For example, cobalt is essential as a component of vitamin B12, required for the production of red blood cells and prevention of pernicious anemia. Deficiency diseases of ruminant animals, caused by inadequate natural levels of cobalt in the diet, are characterized by anemia, weight loss, and retarded growth. Cobalt's ability to stimulate the production of red blood cells in humans has led to its frequent use as a treatment for anemia.

In terms of its toxic effects, probably the most well known and most serious effects of cobalt overdose have been evidenced in the late 1960's and early 1970's, when a high incidence of "beer-cobalt cardiomyopathy" was reported in certain groups of people who drank large quantities of beer containing cobalt chloride, which had been added as a stabilizer to control foaming. (Since then, the practice of adding cobalt to beer as a foam stabilizer has been abandoned). It should be noted, however, that the cardiomyopathy may have also been exacerbated by the fact that the beer-drinkers had protein poor diets and may have had prior cardiac and hepatic damage from alcohol abuse. In support of this possibility, peripheral studies of anemic patients treated with comparable-or even much higher-doses of cobalt did not result in cardiac effects. Cobalt has also been found to be a sensitizer in humans. Individuals can become sensitized following dermal or inhalation exposure, but it has also been shown that oral ingestion of cobalt can trigger flares of dermatitis in patients with pre-existing eczema. There is also an interrelationship between cobalt sensitization and nickel sensitization. Orally administered cobalt has also been found to cause

fetal effects in pregnant rodents, but these effects occurred at dose levels that were so high as to be maternally toxic. In addition, several studies have reported testicular degeneration and atrophy in rats exposed to 5.7 to 30.2 mg cobalt/kg/day for 2-3 months in the diet or in the drinking water. In summary, human data indicate that cobalt does not appear to manifest toxicological symptomology except in unusual circumstances of exposure (i.e excessive oral exposure via the contaminated beer episode, or through occupational sensitization)

Given the contradictory nature and complexity of the various data for cobalt and its biological endpoints—both harmful and beneficial—NCEA indicates that although the existing cobalt data do not identify a single conclusive animal or human study from which one could properly derive an oral RfD, the most sensitive indicators of cobalt toxicity following oral exposure are (1) the increase in hemoglobin in both humans and animals, and (2) the elicitation of dermatitis in sensitized individuals. NCEA indicates that the upper range of average intake for children (0.06 mg/kg/day) is below the levels of cobalt needed to induce polycythemia in both renally compromised patients (0.18 mg/kg/day), and normal patients (0.96 mg/kg/day). Based on this, and given the ubiquitous nature and the relatively well characterized intake of cobalt in food, NCEA recommends that the intake levels described above be used as guidance for an oral exposure to cobalt. Accordingly NCEA has suggested a provisional oral RfD of 6E-2 mg/kg/day for cobalt.

At this time, EPA has not evaluated cobalt in terms of possible carcinogenicity.

Copper: CASRN 7440-50-8.

Copper is a metallic element and a natural component of the earth's crust. Copper can enter the environment either through natural process or human activity, such as copper smelting or ore processing (ATSDR, 1990). Copper is used extensively in industry in components such as wiring and water pipes. Copper is also used in alloys with other metals; for example bronze is an alloy of copper and tin while brass is an alloy of copper and zinc. Copper compounds may be used in to treat certain plant diseases or as a wood preservative. Copper is an essential dietary element for animals and humans and is present in many vitamin supplements. The recommended daily allowance (RDA) for copper, the amount that should be present in a healthy diet, is 1.5 to 3 mg/day (NRC, 1989). Food and drinking water normally contain very small amounts of copper that are sufficient to meet the body's need for this element. Exposure to copper may be assessed through urinary or blood measurements.

Copper is readily absorbed in the body across the GI tract, although the degree of absorption may depend on the material with which it was ingested. Normally, the body has several ways to prevent copper overload but in individuals with Wilson's disease, these mechanisms are not fully functional. Persons with Wilson's disease may therefore be particularly susceptible to copper toxicity.

While some amount of copper is required to maintain a healthy body, higher doses of copper may result in toxicity. The primary symptoms of exposure to high doses of copper are acute in nature; centering on the GI tract, with vomiting, nausea, diarrhea and loss of appetite (ATSDR, 1990). Liver and kidney effects have also been reported in both humans and animals exposed to copper (ATSDR, 1990). These symptoms have been reported in humans across a wide range of doses, from 0.07 to 1,421 mg/kg/day (ATSDR, 1990). The form in which the copper was ingested (e.g., in food, drinking water, alcohol) may be in part responsible for this wide range in sensitivity.

Non-Cancer Health Risks: The oral RfD for copper in the IRIS risk database has been withdrawn, pending further evaluation. This value was based on a report of acute copper toxicity in humans that has been questioned on methodological grounds. However, HEAST lists a derived oral RfD of $3.7\text{E-}2$ mg/kg/day, for this metal. This oral RfD value for copper was derived by the EPA Environmental Criteria and Assessment Office as part of the Drinking Water Criteria Document For Copper (1985). This is based on their calculations and underlying LOAEL assumptions used in deriving the Drinking Water 1-Day Health Advisory of 1.3 mg/l (which is also the recommended level for the Lifetime adjusted acceptable daily intake (AADI)). Copper is an essential element in the diet. There are no data indicating that human exposure to copper results in chronic toxic effects. The available human studies all suggest that the ingestion of between 5.3 and 32 mg copper/person, in a single acute dose, results in gastrointestinal disorders, vomiting, nausea and diarrhea. No lasting adverse effects were reported over this dose range. Moreover, both animal and human data support the concept that the effects of concern from exposure to copper appear to be acute, not chronic, and that the effects (which at the lowest effective doses in laboratory rodents are on the liver and kidney, rather than on the G-I tract)

appear reversible as long as the daily dose is not a relatively massive one. In rats, for example, feeding

2000 mg/kg/day of copper sulfate results in periportal hypertrophy of the liver parenchymal cells after about 2 weeks of dosing, with symptoms most severe at week 6. Kidney histopathology was also noted. However, after 15 weeks of exposure at this dose, almost complete recovery was observed for both organs.

Therefore, in developing the drinking water criteria document for copper (1985), the EPA Environmental Criteria and Assessment Office has utilized the lowest single oral human dose given in the available literature--5.3 mg--as the LOAEL for human exposure. Dividing this by 2 liters intake per day, and using an uncertainty factor of 2, gives the recommended 1-Day Health Advisory, (and ADDI calculation) of 1.3 mg/l. Such a low uncertainty factor is applied because: (1) the key toxic symptom was local G-I irritation, and was not permanent, with no long term effects reported, (2) 5.3 mg/day was the lowest value determined in the literature based on several studies. It was based on fasted subjects, and is thus very conservative, (3) copper is an essential element, and the use of a larger safety factor would bring the level below that considered necessary for human nutrition, and (4) copper absorption is controlled by a hemostatic mechanism, and--in normal individuals--does not accumulate in the body. Calculating back from the Health Advisory of 1.3 mg/l, for a 70 kg person drinking 2 liters of water per day, the "derived RfD" would thus be 0.037 mg/kg/day, or 3.7×10^{-2} mg/kg/day. Critical human toxicologic endpoint for the RfD is G-I irritation.

Exposure of laboratory animals to high concentrations of copper (greater than 100 times the RDA) has produced some birth defects. These effects have not been observed in exposed human populations.

Carcinogenesis: The USEPA has determined that there is insufficient evidence to classify copper as to carcinogenicity (IRIS, 2000). Several animal studies have yielded conflicting results and are of insufficient strength to make a clear determination of carcinogenicity.

Lead: CASRN 7439-92-1

A great deal of human and animal data are available regarding the toxicity of lead. Lead ions are very similar to calcium ions, in terms of size and shape. It follows that metabolically, throughout one's lifetime, about 95 per cent of lead which remains in the body eventually becomes deposited in compact bone. However, because of the way lead is taken up and distributed within the various hard and soft body tissues, risk and toxicity to humans from lead is measured as a function of blood lead level(s). At this time, no oral RfD for lead, has been established by IRIS. This section summarizes lead health studies which relate adverse health effects to blood lead concentrations.

For children, 10 micrograms per deciliter ($\mu\text{g}/\text{dl}$) is the blood lead concentration of concern. A blood lead concentration of below 10 $\mu\text{g}/\text{dl}$ is an acceptable level of exposure (U.S. Environmental Protection Agency, 1994; U.S. Environmental Protection Agency, 1998). The

level of 10 µg/dl is based on children's IQ scores and other functional deficits associated with elevated blood lead levels. Lead health studies have been summarized in several comprehensive reviews prepared by: (Centers for Disease Control and Prevention, 1991) (National Research Council Committee on Measuring Lead in Critical Populations, 1993); (U.S. Department of Health and Human Services, 1999). A threshold below which lead does not affect IQ in children has not been established and a Reference Dose (RfD) is not appropriate for lead.

Sensitive People: Sensitive groups include developing embryos/fetuses/neonates, young children, women, and individuals with chronic neurological dysfunction or kidney disease. Older adults are at risk of hypertension aggravated by lead (National Research Council Committee on Measuring Lead in Critical Populations, 1993). From gestation through the first three years of life, children have an incompletely developed blood-brain barrier and their rapidly developing nervous system is very sensitive to the effects of lead (Rodier, 1995). Lead can increase the permeability of the blood-brain barrier to further increase exposure at the target tissues. The transfer of maternal lead during pregnancy and lactation and normal oral exploratory behaviors increase exposures lead in soil and house dust during this vulnerable period (Goldstein, 1990); (Mushak, 1998). Young children are at risk because compared to adults they absorb more lead from the gastrointestinal tract; retain more absorbed lead; have a greater prevalence of nutritional deficiencies (e.g., calcium, iron, and zinc), which increase both the absorption and the toxic effects of lead. Women who are pregnant, are lactating, or have osteoporosis may be themselves at greater risk due to lead because each of these conditions may intensify the mobilization of lead from bone.

Neurological Effects: Death from encephalopathy has been reported in children and adults with blood lead concentrations as low as 80 and 100 µg/dl, respectively (National Research Council Committee on Measuring Lead in Critical Populations, 1993). IQ decrements, altered behavior, peripheral neuropathy, hearing impairment, reduced motor nerve conduction, and fine-motor dysfunction have been observed in children (Ibid.). Lead causes similar dose-dependent neurotoxic symptoms in adults from encephalopathy, to less severe cognitive impairments, and peripheral neuropathy (Ibid.).

Hematological Effects: Lead interferes with heme synthesis. Reduction of the heme body pool can lead to adverse effects in several physiological systems. Anemia can result from decreased hemoglobin production and increased red blood cell destruction. Lead-induced inhibition of heme synthesis can interfere with the conversion of vitamin D to its hormonal form, 1,25-dihydroxyvitamin D. There is no apparent threshold for indicators of decreased heme synthesis (U.S. Department of Health and Human Services, 1999).

Developmental and Fetal Effects: Lead in maternal blood is shared with the fetus and breast milk can be a significant source of lead for infants (Mushak, 1998). Women with occupational exposures to lead during pregnancy have an increased rate of miscarriages and stillbirths. (Bornschein, Grote, Mitchell, Succop *et al.*, 1989) have identified lead-induced reductions in birth weight, gestational age, and stature in children.

Male Reproductive Effects: In men with occupational lead exposures, decreased sperm count, abnormal sperm morphology, decreased sperm mobility, and hormonal changes have been observed (Alexander, Checkoway, van Netten, Muller *et al.*, 1996).

Acute Effects: In addition to encephalopathy, acute (reversible) nephropathy can occur during the early stages of high exposure to lead. Chronic (irreversible) nephropathy can also occur. Acute exposures to high levels of lead can produce cardiac lesions, electro-cardiographic abnormalities, and hemolytic anemia in children and adults (National Research Council Committee on Measuring Lead in Critical Populations, 1993). Colic is a symptom of severe or clinical lead poisoning. Analysis of U.S. National Health and Nutrition Examination Survey II (NHANES) epidemiological data shows hypertensive effects in the form of elevated systolic and diastolic blood pressure in older adults at blood lead levels below 25 µg/dl (Ibid.).

Carcinogenesis: The oral carcinogenic slope factor for lead is currently under review by EPA.

EPA has classified lead in Group B2 (Possible Human Carcinogen). However, at this time, no carcinogenic slope factor has been developed for lead.

References

1. Alexander, B.H., Checkoway, H., van Netten, C., Muller, C.H., Ewers, T.G., Kaufman, J.D., Mueller, B.A., Vaughan, T.L. & Faustman, E.M. (1996). Semen quality of men employed at a lead smelter. *Occup Environ Med*, 53, 411-6.
2. Bornschein, R.L., Grote, J., Mitchell, T., Succop, P.A., Dietrich, K.N., Krafft, K.M. & Hammond, P.B. (1989). Effects of prenatal lead exposure on infant size at birth. In: *Lead Exposure and Child Development: An International Assessment*. In *Lead Exposure and Child Development: An International Assessment*, A., S.M., D., G.L. & I., S.A. (eds) pp. p. 307-319. Kluwer Academic Publishers: Lancaster, UK.
3. Centers for Disease Control and Prevention. (1991). Preventing Lead Poisoning in Young Children: A Statement on Preventing Lead Poisoning in Young Children by the Centers for Disease Control (CDC). Centers for Disease Control and Prevention: Atlanta, GA.
4. Mushak, P. (1998). New findings on sources and biokinetics of lead in human breast milk: bone lead can target both nursing infant and fetus [comment]. *Environ Health Perspect*, 106, 629-31.
5. National Research Council (U.S.). Committee on Measuring Lead in Critical Populations., Fowler, B.A., National Research Council (U.S.). Board on Environmental Studies and Toxicology. & National Research Council (U.S.). Commission on Life Sciences. (1993). Measuring lead exposure in infants, children, and other sensitive populations. National Academy Press: Washington, D.C.
6. U.S. Department of Health and Human Services, A. (1999). Toxicological Profile for Lead. U.S. Department of Health and Human Services: Atlanta, GA.
7. U.S. Environmental Protection Agency. (1994). OSWER Directive #9355.4-12 Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities. U.S. Environmental Protection Agency, Washington, DC.

8. U.S. Environmental Protection Agency. (1998). OSWER Directive #9200.4-27P Clarification to the 1994 Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities. U.S. Environmental Protection Agency, Washington, DC.

Manganese: CASRN 7439-96-5.

Manganese is a metallic element that is naturally present at low levels in the earth's crust. Manganese can enter the environment either through natural processes or industrial sources such as coal burning power plants or steel foundries (ATSDR, 1996). Manganese and manganese compounds are used in the production of steel, batteries, dietary supplements, ceramics, pesticides and fertilizers (ATSDR, 1997). Food and drinking water normally contain low amounts of manganese. Trace levels of manganese are needed in the normal diet because manganese is a component of several important enzymes. The estimated safe dietary intake for manganese ranges from 0.3 to 5 mg/day, depending on age (NRC, 1989). Exposure to manganese may be assessed measurement of several biological matrices, including blood and urine.

Manganese appears to be only incompletely absorbed in the GI tract after ingestion. Studies in animals and humans have suggest that up to 5% of the manganese dose is absorbed (ATSDR, 1997). Manganese is eliminated from the body, primarily in the feces, with half-times reported to range from 13 to 37 days (ATSDR, 1997).

While small amounts of manganese are necessary for good health, higher doses may lead to toxicity. Workers who have been exposed to high levels of manganese through inhalation have developed emotional or mental disturbances and problems with body movements in a syndrome known as manganism. Impotence has also been reported in men occupationally exposed to high levels of manganese by inhalation. Evidence that these effects also occur in humans from oral exposure to manganese is much weaker, but studies in animals have shown that very high levels of manganese in the diet can cause brain disturbances or testicular damage. These effects in animals occurred at doses 100 to 1000 times higher than the typical daily intake for humans. There is inadequate information to determine whether manganese exposure causes toxicity in developing animals when exposed *in utero*.

Non-Cancer Health Risks: The oral RfD for manganese is 1.4E-1 mg/kg/day. The RfD is based on estimates of dietary intakes in various human populations. Although the critical toxicologic endpoint in deriving this RfD was centered upon epidemiologic evaluation of evidence for effects on the central nervous system ("manganism"), the populations studied did not appear to exhibit adverse effects of manganese exposure (IRIS, 2000) at the doses levels under consideration. From these studies, EPA determined that 10 mg/kg/day represents an upper bound on the normal dietary intake for manganese. This is equivalent to 0.14 mg/kg/day for a 70 kg individual. Because the data are derived from human populations, no modifying or uncertainty factors are used.

Confidence in the RfD is medium, based upon the many human epidemiologic studies used in derivation. Uncertainty factor is 1. However, some concerns remain about potential sensitivity in specialized populations.

Carcinogenesis: The USEPA has determined that there is insufficient evidence to classify manganese as to carcinogenicity (IRIS, 2000). Several studies have suggested an increase in tumors after exposure to manganese compounds but the data has been characterized as “equivocal”, typically due to a weak dose-response relationship (ATSDR, 1997).

References

1. ATSDR (Agency for Toxic Substances and Disease Registry). 1997.

Methylmercury: CASRN 22967-92-6

Inorganic mercury compounds include elemental mercury metal (Hg⁰), and its various divalent/trivalent mercury salts. Mercury compounds undergo global biogeochemical cycling in the environment, especially in freshwater aquatic ecosystems, in which inorganic mercury is methylated by microorganisms to form the much more toxic organic form, methyl mercury (MeHg). In the pregnant female, methyl mercury can impact the developing fetus by crossing the placenta and the blood-brain barrier, where it can cause serious neurological and other consequences by interfering with cell division in the developing brain, and by affecting the development of the embryonic neural crest.

Methyl mercury undergoes significant bioaccumulation in all aquatic food webs. It has also entered the environment historically as a by-product of the plastic industry, and (along with ethyl mercury) as a fungicidal dressing for seed grains. Approximately 90 percent of the mercury in biological organisms is considered to be sequestered in the form of methyl mercury, and the main dietary source of methyl mercury in the environment is believed to come almost exclusively from fish. Thus, organic mercury (rather than metallic mercury per se) is considered more relevant to fish contamination and is subsequently used for toxicity analysis in most environmental risk assessments.

Short chain alkyl mercurials like MeHg have a half-life in man of approximately 65 days. In the body, these short chain alkyl mercury compounds tend to be found in at higher levels in ectodermally-derived tissues like skin, and especially hair. In recent years, hair has become a fairly reliable dosimeter among many toxicologists for estimating body burden of organic mercury. The mean hair level (as total mercury) for the normal US population is estimated to be about one part per million (ppm). The World Health Organization “Safe Limit” for hair is about 5 ppm. Extreme fish eaters have shown hair mercury levels as high as 170 ppm.

The current oral RfD for methyl mercury is 1 x E-4 mg/kg/day (0.1 ug/kg/day). It is based on a study of widespread human exposure to this compound during 1971-72 in Iraq, in which methylmercury treated seed grain was mistakenly used in home-baked bread. The critical toxicologic endpoints in this assessment were developmental and neurological abnormalities in human infants. A benchmark dose was used rather than a NOAEL/LOAEL approach to analyze the neurological effects in infants as the response variable. Uncertainty factor is 10, and confidence in the RfD—and its supporting database—is medium.

At the request of Congress, In July 2000, EPA's RfD for methyl mercury was thoroughly reviewed by the National Academy of Science (NAS). This included an extensive review of new research findings which have emerged since EPA's current RfD was developed in 1995. The NAS analyzed more recent and comprehensive studies of fish-eating populations in the Faroe Islands, Seychelle Islands, and New Zealand. NAS concurred with EPA's RfD of 0.1 ug/kg/day, but also concluded that the Faroe Islands analysis should now be used as the critical study for deriving this reference dose.

The potential for carcinogenicity of mercury and mercury compounds is currently under review by EPA.

Nickel: CASRN 7440-02-0

Nickel is a metal which is quite abundant in the earth's crust. Nutritionally, it is believed to be an essential trace metal required to maintain health in animals. Casarret and Doull indicate that over the past few years, evidence is mounting that nickel may be a nutritionally essential trace metal in the diet of humans as well. In the environment, nickel is predominantly found in soil and sediment, usually in association with iron or manganese. In general, nickel does not appear to significantly bioaccumulate in fish, plants, or animals used for food. Metallic nickel combines with other substances to form various nickel sulfides, nickel carbonyl, and other nickel compounds, some of which are of considerable toxicological importance in the occupational or industrial setting. Nickel carbonyl--Ni(CO)₄--is the most toxic form, with many reports of serious and potentially fatal gastrointestinal and respiratory consequences following acute workplace exposures. Another nickel compound, nickel subsulfide --Ni₃S₂-- is a carcinogen in humans via inhalation.

IRIS does not list a specific RfD for metallic nickel, per se. Rather, the oral RfD is derived for "nickel soluble salts". This oral RfD for nickel soluble salts, is 2E-2 mg/kg/day. It is based primarily on a two-year feeding study in rats, (presumably) dosed with dietary nickel as the chloride salt, in which body and organ weights of both sexes were significantly decreased at the high dose levels. LOAEL from this study was 50 mg/kg/day (100 ppm in the diet). NOAEL was 5 mg/kg/day (10 ppm in the diet). Similar dietary exposure studies in dogs resulted in depressed body weight gain at about 63 mg/kg/day (2500 ppm nickel in the diet), but no effects were noted at lower doses. It is thus likely that the rat is the more sensitive of the two species. Uncertainty factor is 300. Confidence in the data is medium.

In addition to the effects on organ weights described in the critical study, two other sensitive toxicological endpoints exist for nickel. These are neonatal mortality, and dermatotoxicity. While no reproductive effects have been associated with nickel exposure to humans, several studies in laboratory animals have demonstrated fetotoxicity. Nickel is also a well-known contact irritant to skin (e.g., from jewelry). In addition, many studies have also demonstrated dermal

effects in sensitive humans resulting from ingested nickel. For such hypersensitivity reactions, it is accordingly difficult to establish a dose-response relationships.

Soluble salts of nickel have not been evaluated by the EPA in terms of potential carcinogenicity. However, nickel refinery dust and specific nickel compounds—nickel carbonyl and nickel subsulfide—have been evaluated. Some of these compounds—which are found in certain occupational exposures in industrial situations—are classified as possible probable human carcinogens by inhalation. Summaries of these evaluations are on IRIS.

For purposes of this assessment, nickel acquired dietarily from fish tissue is not considered to be a carcinogen, and no data exist to indicate otherwise.

Selenium: CASRN 7782-49-2

Selenium is a metallic element and a natural component of the earth's crust. Selenium can enter the environment either through natural process or human activity, chiefly the burning of coal or oil (ATSDR, 1996). Selenium is present in small amounts in plastics, paints, fungicides, certain types of glass, anti-dandruff shampoos, and photographic supplies (ATSDR, 1996). Selenium is also an essential dietary element for animals and humans and is present in many vitamin supplements. The recommended daily allowance (RDA) for selenium, the amount that should be present in a healthy diet, is 0.055 mg/day for women and 0.070 mg/day for men. While small amounts of selenium are required to maintain a healthy body, higher amounts of selenium may cause toxicity. Toxic effects of selenium have been reported at levels only 5 to 10 times the RDA (ATSDR, 1996).

Although elemental selenium and its selenate (Se^{4+}) salts are insoluble, selenates (Se^{6+})—much in the manner of sulfates—, and are readily taken up by biological systems. After initial exposure, highest accumulation is initially in the liver and kidneys. Long term exposure to selenium may result in selenosis, resulting in brittle hair and fingernail deformities, and at more serious levels, loss of sensation in the arms and legs. Exposure to selenium in humans may be assessed through urinary or blood selenium measurements. Exposure of laboratory animals to very high concentrations of selenium (hundreds of times the RDA) has also resulted in birth defects. These effects have not been observed in exposed human populations.

Non-Cancer Health Risks: The oral RfD for selenium is $5\text{E-}3$ mg/kg/day, or approximately 5 times the RDA. This value was established based on the study of Yang et al. (1989) which documented selenosis in a human population with long term exposure to selenium. This study was conducted in a region of China with unusually high levels of naturally occurring selenium in groundwater and soil. Critical effects noted included: liver dysfunction and clinical signs of selenosis (such as hair or nail loss, morphological changes of the nails, etc. Chronic toxic effects include lowered hemoglobin levels, mottled teeth, skin lesions and CNS abnormalities. In this study, no effects were observed at an estimated intake of 0.015 mg/kg/day (NOAEL), though effects were observed at a level of 0.023 mg/kg/day (LOAEL), highlighting the limited range over which toxicity may ensue. An uncertainty factor of 3 is used to account for sensitive individuals.

Confidence in the RfD is high, based upon the many animal studies and epidemiologic studies supporting the principal study.

Carcinogenesis: Most selenium compounds are not believed to cause cancer (IARC, 1987) although there is a lack of human data and the results of several simple screening tests are contradictory (IRIS, 2000). Some studies also indicate that animals treated with low levels of selenium had a reduced risk of cancer relative to animals that received no selenium, further complicating interpretation of the study results. The existing cancer data for selenium are thus conflicting and equivocal. For this reason, IRIS lists selenium in group D (not classifiable as to carcinogenicity). At this time there is thus no credible evidence for considering selenium to be a carcinogen.

Selenium Sulfide: CASRN 7446-34-6

At this time, no oral RfD has been developed for selenium sulfide. However, it is reasonable to assume that the sulfide form of selenium would exert its various higher-dose non-carcinogenic toxicologic effects in a mechanism similar to that outlined above for other selenium compounds. In contrast to other selenium compounds, however, selenium sulfide, has been classified by EPA as a probable human carcinogen (Class B2). Human evidence is inadequate/lacking. The classification is based on long term exposure studies using laboratory mice, in which liver and lung tumors were noted. It is important to note that animals in these studies were given selenium sulfide at concentrations over 100 times the RDA for selenium and therefore well above likely human exposures. In addition, selenium sulfide compounds are generally water insoluble and would pose limited risk of exposure via drinking water or other water mediated pathways (i.e., fish contamination).

Despite the B2 classification as to likelihood of carcinogenicity for this compound, no oral carcinogenic slope factor has been developed for selenium sulfide at this time.

References

1. ATSDR (Agency for Toxic Substances and Disease Registry). 1996. Toxicological Profile for Selenium.
2. IRIS 2000. Integrated Risk Information System (On line database)
4. Yang, G., S. Yin, R. Zhou, et al. 1989b. Studies of safe maximal daily dietary Se-intake in a seleniferous area in China. II. Relation between Se-intake and the manifestation of clinical signs and certain biochemical alterations in blood and urine. J. Trace Elem. Electrolytes Health Dis. 3(2): 123-130.

Silver: CASRN 7440-22-4

Silver is not considered to be significantly toxic at normal levels of environmental exposure, nor does it normally occur at significant levels in human or animal tissues. Silver is also used medicinally; e.g., the historic and widespread use of silver nitrate as a prophylactic treatment for

eye infections in the newborn. Other medicinal uses of silver salts include various preparations utilized as germicides, antiseptics, astringents, and caustics.

Large oral doses of silver nitrate cause severe gastrointestinal irritation, due to its caustic action. The critical toxicologic effect in humans ingesting sufficiently high doses of silver is argyria, a medically benign, but permanent bluish-gray discoloration of the skin. Argyria results from the deposition of silver in the dermis, and also from silver-induced production of melanin.

The oral RfD for silver (as silver nitrate) is 5×10^{-3} mg/kg/day, with the critical toxicologic endpoint of argyria, as evidenced in a 1935 study of intravenously-dosed humans. No NOAEL was established for this endpoint. However, IRIS cites a derived a LOAEL of 0.014 mg/kg/day. This was based on a 1 gram total dose (administered as 4 grams silver arsphenamine), and based on conversion from the total i.v. dose to a total oral dose of 25 grams (see IRIS for specifics) and dividing by 70 kg (adult body wt.), and 25,500 days (a lifetime, or 70 years) of exposure. The RfD has an uncertainty factor of 3. Despite this, confidence in the RfD is low, because all but one of the individuals in the human study did not develop argyria until a fivefold greater LOAEL dose level had been administered.

Silver is not considered to be a carcinogen. EPA has classified silver in Group D (not classifiable as to human carcinogenicity).

Thallium: CASRN 7440-28-0

Thallium is a metallic element and a natural component of the earth's crust. Thallium can enter the environment either through natural process or human activity; low levels of thallium are produced during the burning of coal, the production of cement and the smelting of certain metals (ATSDR, 1992). Thallium may be used in electronic components, certain types of glass and specialized medical procedures to investigate heart disease (ATSDR, 1992). Thallium has also been used historically as a potent rodenticide.

Thallium is not believed to be an essential nutrient, and is not a normal constituent of animal tissues. In the body, thallium distributes much in the same fashion as potassium, which probably accounts for its propensity toward neurological effects as sufficiently high doses are reached. Thallium is one of the more toxic metals, and can cause injury to the nervous system, liver, and kidney. There is limited knowledge about the low-dose toxicity of thallium to humans and only a few studies in laboratory animals. Studies in both humans and animals suggest that thallium is well absorbed across the GI tract. Thallium is eliminated from the body fairly slowly in humans, with the reported half-life from one study reported as 22 days (ATSDR, 1992). Thallium is distributed—much like potassium—throughout the body, with the liver, kidney, heart and skin being the primary targets for this chemical. Highest concentrations after acute doses are in urine and kidney. Exposure to thallium may be assessed through evaluation of hair or urine. At levels of exposure above 1 mg/kg/day in laboratory animals, thallium is known to damage the nervous system and cause loss of hair (alopecia). Thallium has not been shown to be a specific developmental toxicant, that is, one that is capable of causing birth defects in the unborn child at

levels that do not harm the mother. Low levels of thallium exposure in rats have resulted in altered sperm and testicular function. These results have not been observed in humans.

Non-Cancer Health Risks: USEPA has developed reference doses (RfDs) for specific thallium compounds. The available RfDs are:

Thallium acetate	9E-5 mg/kg/day
Thallium carbonate	8E-5 mg/kg/day
Thallium chloride	8E-5 mg/kg/day
Thallium nitrate	9E-5 mg/kg/day
Thallium sulfate	8E-5 mg/kg/day

RfDs are not available--or have been withdrawn--for thallium oxide and thallium selenite.

For purposes of this report, the RfD for thallium will be assumed to be 9E-5 mg/kg/day, using the supporting toxicological data for thallium nitrate, as evidenced in a 1986 oral subchronic study in rats.

Although compound-specific, the RfDs are all based the results of a study involving thallium sulfate with appropriate adjustment for differing molecular weights between different thallium compounds. The thallium sulfate study (EPA, 1986) involved administration of the compound to rats for 90 days. Limited loss of hair and changes in some blood chemistry parameters were observed, but these were not determined to be serious adverse effects. Critical toxicologic endpoints were elevated levels of critical enzymes (SGOT and LDH) associated with liver function changes. The NOAEL of 0.25 mg/kg/day (the maximum study dose) was divided by an uncertainty factor of 3000 to arrive at the RfD. Another study (Formigli et al., 1986) observed testicular degeneration at a thallium sulfate dose of 0.7 mg/kg/day (30 to 60 day treatment) suggesting that the threshold for that particular toxic endpoint is also fairly close to the NOAEL. Confidence in the RfD is considered to be low due to the limited amount of data available for thallium toxicity and the lack of any chronic or developmental toxicity studies.

Carcinogenesis: It is unknown whether thallium exposure may cause cancer. Studies on the cancer causing potential of this compound are needed. Limited studies in humans have not shown an increase in cancer mortality but these studies had methodological limitations that limit the conclusions that may be drawn from them (IRIS, 2000). Thallium exposure to isolated cells (both mamallian and bacterial) did result in damage to DNA, suggesting that thallium is a genotoxicant (ATSDR, 1992). At this time USEPA believes there is insufficient evidence to decide on the carcinogenicity of thallium.

References

1. ATSDR (Agency for Toxic Substances and Disease Registry). 1992. Toxicological Profile for thallium. TP-91/26
2. IRIS 2000. Integrated Risk Information System (On line database)
3. Formigli, L., R. Schelsi, P. Poggi, et al. 1986. Thallium-induced testicular toxicity in the rat. Environ. Res. 40(2): 531-539.

4. U.S. EPA. 1986. Subchronic (90-day) toxicity of thallium sulfate in Sprague-Dawley rats. Office of Solid Waste, Washington, DC.

Vanadium: CASRN 7440-62-2

Vanadium is a metallic element that is naturally present at low levels in the earth's crust. Vanadium is introduced into the environment by both natural processes or industrial activities such as steel production or combustion of coal or fuel oil (ATSDR, 1992). Vanadium is used in the manufacture of rubber, plastics, ceramics and other chemicals (ATSDR, 1992). Foodstuffs typically contain trace amounts of vanadium and the dietary intake of this mineral is about 0.01 to 0.02 mg per day. Vanadium has not been found to be an essential nutrient and does not appear to have a physiological role in the body. Exposure to vanadium may be assessed by measurement in several biological matrices, including blood and urine. Casarett and Doull indicate that municipal water supplies contain from about 1 to 6 ppb. The normal serum level for vanadium in humans is about 35 to 48 micrograms per 100 mL.

Vanadium has an affinity for fats and oils. After absorption, vanadium is primarily found in the fat. Bone and teeth stores also are important in making up the total body burden, and some amounts may also be found in kidney, liver and lung. Since vanadium is poorly absorbed, most of the ingested dose is eliminated in the feces over the course of several days. Exposure and human toxicity information for vanadium is largely based on inhalation and dust exposures in the workplace. Under such conditions the toxic action of vanadium is primarily on the respiratory tract, where it is an irritant. There are essentially no human data on the health effects of vanadium after exposure by ingestion. Data in animals are also limited but more extensive than that for humans. In animal studies, exposure to vanadium has resulted in adverse effects in the kidney and spleen and during fetal development (ATSDR, 1992). The kidney and spleen effects were characterized as mild or minor in nature.

Non-Cancer Health Risks: HEAST lists an oral RfD for vanadium at $7\text{E-}3$ mg/kg/day. The RfD is based on an oral dosing study conducted in rats using vanadium pentoxide (Stokinger et al., 1953). Decreased levels of cystine were observed in the hair of rats fed 179 parts per million vanadium pentoxide in their diet. Specific critical toxicologic endpoints were not identified. However, the no observed adverse effects level (NOAEL) in this study was reported as 17.9 ppm in the diet or 0.9 mg/kg/day. The NOAEL was divided by a factor of 10 to account for interspecies differences and 10 to protect sensitive subgroups in the exposed population. Confidence in the RfD is low due to the limited amount of toxicological data available for this compound. The Agency for Toxic Substances and Disease Registry (ATSDR) calculated an intermediate-duration minimal risk level (MRL) for vanadium based on a study by Domingo et al., (1985) that observed mild histological changes in the kidney, liver and spleen of rats orally dosed with sodium metavanadate. The NOAEL in this study was 0.3 mg vanadium/kg/day and the MRL was $3\text{E-}3$ mg/kg/day. Note that the RfD was derived for vanadium pentoxide rather than vanadium itself. If based on the actual dose of vanadium in the Stokinger et al. study, the RfD would be approximately $5\text{E-}3$ mg/kg/day and therefore very similar to the MRL.

Carcinogenesis: The USEPA has determined that there is insufficient evidence to classify vanadium as to carcinogenicity (IRIS, 2000). Oral dosing with vanadium did not produced tumors in one animal study (Schroeder and Balassa, 1967). However, this study was not sufficiently rigorous in its design to allow for a clear determination of carcinogenic potential (ATSDR, 1992).

References

1. ATSDR (Agency for Toxic Substances and Disease Registry). 1992. Toxicological Profile for Vanadium. TP-91/29
2. IRIS 2000. Integrated Risk Information System (On line database)
3. Stokinger, H.E., W.D. Wagner, J.T. Mountain, F.R. Stacksill, O.J. Dobrogorski and R.G. Keenan. 1953. Unpublished results. Division of Occupational Health, Cincinnati, OH. (Cited in Patty's Industrial Hygiene and Toxicology, 3rd ed., 1981)
4. Schroeder HA, Balassa JJ. 1967. Arsenic, germanium, tin and vanadium in mice: effects on growth, survival and tissue levels. J Nutr. 92(2):245-52.

Zinc: CASRN 7440-66-6.

Zinc is a metallic element commonly found in soil and other environmental media. Zinc may enter environmental media either through natural process or human activity, such as coal burning, metal processing, steel production or waste combustion (ATSDR, 1994). Zinc compounds (primarily zinc oxide and zinc sulfide) are used in many applications including pigment manufacture, rubber production or wood preservation. Zinc compounds are also found in sun blocks, certain medical ointments and shampoos (ATSDR, 1994). Zinc is an essential dietary component and is present in small amounts in foods and vitamin supplements. The recommended daily allowances (RDA) for zinc, the amount that should be present in a healthy diet, are 5 mg/day for infants, 10 mg/day for children (1-10 yrs), 15 mg/day for men and 12 mg/day for women (NRC, 1989). This level of zinc is normally met by the typical daily food and water intake. Exposure to zinc may be assessed through blood measurements.

Zinc is readily absorbed in the body across the GI tract, although the degree of absorption may depend on the material with which it was ingested and the nutrient status of the individual. Persons with sufficient nutritional levels of zinc are reported to absorb 20 to 30% of ingested zinc (ATSDR, 1994). Once absorbed, zinc is distributed throughout the body with the majority stored in muscle tissue and bone (ATSDR, 1994). Excess zinc is eliminated rapidly from the body, with a half life reckoned in days (ATSDR, 1994).

While a limited zinc intake is required for good health, higher doses of zinc may result in toxicity. The primary symptoms of acute exposure to high doses of zinc involve the gastrointestinal system and include nausea and vomiting (ATSDR, 1994). Damage to the kidney, pancreas and circulatory system (i.e., anemia) have also been reported in animals that have consumed high doses of zinc for extended periods of time. The doses associated with these effects are more than ten times the RDA. Exposure of laboratory animals to high concentrations of zinc (100 to 1000 times the RDA) has led to reproductive and developmental problems. These effects have not

been observed in exposed human populations and it should be pointed out that insufficient intake of zinc may also lead to these types of problems.

Non-Cancer Health Risks: The oral RfD for zinc is 3E-1 mg/kg/day. The RfD is based on a human study that examined the effects of zinc dietary supplements on the nutritional status of copper and iron (Yadrick et al., 1989). High levels of zinc supplementation significantly depressed levels of copper and iron associated proteins. More specifically, there was a 47 per cent decrease in erythrocyte superoxide dismutase (ESOD) concentrations in adult females after ten weeks of zinc exposure. The lowest observed adverse effects level (LOAEL) was 1 mg/kg/day. Because the data are derived from human populations, cross-species extrapolation was not required. The LOAEL was divided by a factor of 3 (to account for lack of a No Observed Adverse Effect Level but acknowledging zinc is a necessary nutrient), thus arriving at the RfD. Confidence in the RfD is medium, because the chosen study is consistent with a number of other human studies of zinc toxicity. Confidence is only medium because the human studies only involved short-term (rather than lifetime) dosing.

Carcinogenesis: The US EPA has determined that there is insufficient evidence to classify zinc as to carcinogenicity (IRIS, 2000). Zinc has not been found to cause cancer in humans and no sufficiently clear evidence of cancer in experimental animals has been obtained.

References

1. ATSDR (Agency for Toxic Substances and Disease Registry). 1994. Toxicological Profile for Zinc (Update). TP-93/15
2. IRIS 2000. Integrated Risk Information System (On line database)
3. NRC (National Research Council). 1989. Recommended Dietary Allowances. 10th Ed. Washington DC National Academy Press.
4. Yadrick, M.K., M.A. Kenney and E.A. Winterfeldt. 1989. Iron, copper, and zinc status: Response to supplementation with zinc or zinc and iron in adult females. *Am. J. Clin. Nutr.* 49:



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**COLUMBIA RIVER BASIN FISH
CONTAMINANT SURVEY**

**VOLUME I
Appendix D**

Summary Statistics by Basin, Tributary and Site

January 2002

**Prepared by
U.S. Environmental Protection Agency
Region 10
Seattle, Washington**

Appendix D-1: Site Summary Statistics
Bridgelp Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Dioxin/furans	2,3,7,8-TCDD	WB	3	3	0.000060	0.000080	0.000070	0.000010
48	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.00018	0.00018	0.00018	2.6E-12
48	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	3	0.00012	0.00013	0.00012	0.0000058
48	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	3	0.00014	0.00017	0.00015	0.000017
48	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	3	0.000050	0.000060	0.000053	0.0000058
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00036	0.00042	0.00040	0.000032
48	Dioxin/furans	OCDD	WB	3	3	0.00075	0.00098	0.00089	0.00013
48	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00076	0.0011	0.00096	0.00018
48	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.000050	0.000060	0.000053	0.0000058
48	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00011	0.00012	0.00012	0.0000058
48	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	3	0.000020	0.000020	0.000020	0.00
48	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	3	0.000030	0.000040	0.000033	0.0000058
48	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	3	0.000050	0.000060	0.000057	0.0000058
48	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00013	0.00015	0.00014	0.000010
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000010	0.00012	0.000078	0.000064
48	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
48	Dioxin/furans	OCDF	WB	3	3	0.000050	0.000080	0.000067	0.000015
48	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	630	1,000	390	98
48	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	630	1,000	390	98
48	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	630	1,000	390	98
48	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	630	1,000	390	98
48	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	630	1,000	390	98
48	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	250	400	160	39
48	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	630	1,000	390	98
48	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	250	400	160	39
48	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	250	400	160	39
48	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	250	400	160	39
48	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	250	400	160	39
48	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	630	1,000	390	98
48	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	250	400	160	39
48	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	250	400	160	39
48	Guaiacols/Phenols	Phenol	WB	3	0	250	400	160	39
48	Metals	Aluminum	WB	3	3	22,000	64,000	37,000	23,000
48	Metals	Antimony	WB	3	0	50	50	25	0.00
48	Metals	Arsenic	WB	3	3	260	300	280	21
48	Metals	Barium	WB	3	3	1,900	2,100	2,000	150
48	Metals	Beryllium	WB	3	2	4.0	8.0	5.3	3.1
48	Metals	Cadmium	WB	3	3	22	32	29	5.8
48	Metals	Chromium	WB	3	3	120	230	180	55
48	Metals	Cobalt	WB	3	3	86	120	96	17
48	Metals	Copper	WB	3	3	880	1,800	1,200	530
48	Metals	Lead	WB	3	3	37	78	54	22
48	Metals	Manganese	WB	3	3	17,000	20,000	18,000	1,700
48	Metals	Mercury	WB	3	1	40	53	32	19
48	Metals	Nickel	WB	3	3	270	600	400	180
48	Metals	Selenium	WB	3	3	280	280	280	0.00
48	Metals	Silver	WB	3	0	100	100	50	0.00
48	Metals	Thallium	WB	3	0	50	50	25	0.00
48	Metals	Vanadium	WB	3	3	140	270	190	66
48	Metals	Zinc	WB	3	3	20,000	21,000	20,000	500
48	PCBs	Aroclor 1016	WB	3	0	21	23	11	0.50
48	PCBs	Aroclor 1221	WB	3	0	21	23	11	0.50
48	PCBs	Aroclor 1232	WB	3	0	21	23	11	0.50
48	PCBs	Aroclor 1242	WB	3	0	21	23	11	0.50
48	PCBs	Aroclor 1248	WB	3	0	21	23	11	0.50
48	PCBs	Aroclor 1254	WB	3	3	18	32	25	7.0
48	PCBs	Aroclor 1260	WB	3	3	27	49	34	13
48	PCBs	PCB 77	WB	3	3	0.031	0.037	0.034	0.0028
48	PCBs	PCB 105	WB	3	3	0.53	0.59	0.57	0.030
48	PCBs	PCB 114	WB	3	3	0.043	0.050	0.047	0.0035
48	PCBs	PCB 118	WB	3	3	1.0	1.3	1.1	0.14
48	PCBs	PCB 123	WB	3	3	0.026	0.039	0.030	0.0072
48	PCBs	PCB 126	WB	3	1	0.0021	0.012	0.0048	0.0064
48	PCBs	PCB 156	WB	3	3	0.28	0.35	0.30	0.040
48	PCBs	PCB 157	WB	3	0	0.0044	0.0068	0.0028	0.00059
48	PCBs	PCB 167	WB	3	3	0.13	0.19	0.15	0.033
48	PCBs	PCB 169	WB	3	1	0.00073	0.0058	0.0022	0.0031
48	PCBs	PCB 170	WB	3	3	0.74	1.3	0.94	0.33
48	PCBs	PCB 180	WB	3	3	2.1	4.1	2.8	1.1
48	PCBs	PCB 189	WB	3	3	0.029	0.045	0.035	0.0086
48	Pesticides	Aldrin	WB	3	0	2.8	3.5	1.5	0.20
48	Pesticides	Alpha-BHC	WB	3	0	2.8	3.5	1.5	0.20
48	Pesticides	Alpha-Chlordene	WB	3	0	2.8	3.5	1.5	0.20
48	Pesticides	Beta-BHC	WB	3	0	2.8	3.5	1.5	0.20
48	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	2.8	3.5	1.5	0.20
48	Pesticides	cis-Nonachlor	WB	3	0	2.8	3.5	1.5	0.20

Appendix D-1: Site Summary Statistics
Bridgelip Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Pesticides	DDD-o,p'	WB	3	3	8.7	11	9.9	1.2
48	Pesticides	DDE-o,p'	WB	3	3	5.9	7.9	6.8	1.0
48	Pesticides	DDT-o,p'	WB	3	0	2.8	3.5	1.5	0.20
48	Pesticides	DDD-p,p'	WB	3	3	52	72	65	11
48	Pesticides	DDE-p,p'	WB	3	3	310	560	400	140
48	Pesticides	DDT-p,p'	WB	3	3	37	52	46	8.1
48	Pesticides	DDMU	WB	3	3	10	21	16	5.5
48	Pesticides	Delta-BHC	WB	3	0	2.8	3.5	1.5	0.20
48	Pesticides	Endosulfan Sulfate	WB	3	3	3.5	5.4	4.6	1.0
48	Pesticides	Gamma-Chlordane	WB	3	0	2.8	3.5	1.5	0.20
48	Pesticides	Gamma-Chlordene	WB	3	0	2.8	3.5	1.5	0.20
48	Pesticides	Heptachlor	WB	3	0	2.8	3.5	1.5	0.20
48	Pesticides	Heptachlor Epoxide	WB	3	0	2.8	3.5	1.5	0.20
48	Pesticides	Hexachlorobenzene	WB	3	0	2.8	3.5	1.5	0.20
48	Pesticides	Lindane	WB	3	0	2.8	3.5	1.5	0.20
48	Pesticides	Mirex	WB	3	0	2.8	3.5	1.5	0.20
48	Pesticides	Oxychlordane	WB	3	0	2.8	3.5	1.5	0.20
48	Pesticides	Pentachloroanisol	WB	3	0	2.8	3.5	1.5	0.20
48	Pesticides	Toxaphene	WB	3	0	80	85	41	1.3
48	Pesticides	trans-Nonachlor	WB	3	0	2.8	3.5	1.5	0.20
48	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	6.3	10	3.9	0.96
48	Semivolatiles	1,2-Diphenylhydrazine	WB	3	1	6.3	14	6.9	6.1
48	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	13	20	7.9	2.0
48	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	25	40	16	3.9
48	Semivolatiles	2-Chloronaphthalene	WB	3	0	13	20	7.9	2.0
48	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	6.3	10	3.9	0.96
48	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	6.3	10	3.9	0.96
48	Semivolatiles	Acenaphthene	WB	3	0	13	20	7.9	2.0
48	Semivolatiles	Acenaphthylene	WB	3	0	6.3	10	3.9	0.96
48	Semivolatiles	Anthracene	WB	3	0	6.3	10	3.9	0.96
48	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	6.3	10	3.9	0.96
48	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	6.3	10	3.9	0.96
48	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	6.3	10	3.9	0.96
48	Semivolatiles	Benzo(a)anthracene	WB	3	0	6.3	10	3.9	0.96
48	Semivolatiles	Benzo(a)pyrene	WB	3	0	6.3	10	3.9	0.96
48	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	13	20	7.9	2.0
48	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	6.3	10	3.9	0.96
48	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	6.3	10	3.9	0.96
48	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	13	20	7.9	2.0
48	Semivolatiles	Chrysene	WB	3	0	6.3	10	3.9	0.96
48	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	13	20	7.9	2.0
48	Semivolatiles	Dibenzofuran	WB	3	0	6.3	10	3.9	0.96
48	Semivolatiles	Fluoranthene	WB	3	0	13	20	7.9	2.0
48	Semivolatiles	9H-Fluorene	WB	3	0	6.3	10	3.9	0.96
48	Semivolatiles	Hexachlorobutadiene	WB	3	0	6.3	10	3.9	0.96
48	Semivolatiles	Hexachloroethane	WB	3	0	6.3	10	3.9	0.96
48	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	13	20	7.9	2.0
48	Semivolatiles	Naphthalene	WB	3	0	14	29	10	3.8
48	Semivolatiles	Naphthalene, 1-methyl-	WB	3	1	6.3	10	5.2	2.2
48	Semivolatiles	Naphthalene, 2-methyl-	WB	3	3	12	20	16	4.1
48	Semivolatiles	Nitrobenzene	WB	3	0	6.3	10	3.9	0.96
48	Semivolatiles	Phenanthrene	WB	3	0	6.3	10	3.9	0.96
48	Semivolatiles	Pyrene	WB	3	0	13	20	7.9	2.0
48	Semivolatiles	Retene	WB	3	0	13	20	7.9	2.0

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Dioxin/furans	2,3,7,8-TCDD	WB	2	2	0.00017	0.00021	0.00019	0.000028
8	Dioxin/furans	1,2,3,7,8-PeCDD	WB	2	2	0.000050	0.000090	0.000070	0.000028
8	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	2	1	0.000020	0.000030	0.000020	0.000014
8	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	2	0	0.000020	0.000020	0.000010	0.00
8	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	2	1	0.000020	0.000030	0.000020	0.000014
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	2	2	0.00020	0.00021	0.00021	0.000071
8	Dioxin/furans	OCDD	WB	2	2	0.00084	0.0010	0.00093	0.00013
8	Dioxin/furans	2,3,7,8-TCDF	WB	2	2	0.0028	0.0036	0.0032	0.00058
8	Dioxin/furans	1,2,3,7,8-PeCDF	WB	2	2	0.000040	0.000040	0.000040	0.00
8	Dioxin/furans	2,3,4,7,8-PeCDF	WB	2	2	0.000070	0.00011	0.000090	0.000028
8	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	2	0	0.000010	0.000020	0.0000075	0.0000035
8	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	2	0	0.000010	0.000020	0.0000075	0.0000035
8	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	2	0	0.000010	0.000020	0.0000075	0.0000035
8	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	2	1	0.000010	0.000020	0.000010	0.00
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	2	1	0.000020	0.000060	0.000035	0.000035
8	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	2	0	0.000010	0.000020	0.0000075	0.0000035
8	Dioxin/furans	OCDF	WB	2	1	0.000020	0.00011	0.000060	0.000071
8	Guaiacols/Phenols	4-Chloroguaiacol	WB	2	0	920	930	460	1.4
8	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	2	0	920	930	460	1.4
8	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	2	0	920	930	460	1.4
8	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	2	0	920	930	460	1.4
8	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	2	0	920	930	460	1.4
8	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	2	0	370	370	180	0.35
8	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	2	0	920	930	460	1.4
8	Guaiacols/Phenols	Tetrachloroguaiacol	WB	2	0	370	370	180	0.35
8	Guaiacols/Phenols	2-Chlorophenol	WB	2	0	370	370	180	0.35
8	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	2	0	370	370	180	0.35
8	Guaiacols/Phenols	2,4-Dichlorophenol	WB	2	0	370	370	180	0.35
8	Guaiacols/Phenols	2,4-Dimethylphenol	WB	2	0	920	930	460	1.4
8	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	2	0	370	370	180	0.35
8	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	2	0	370	370	180	0.35
8	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	2	0	370	370	180	0.35
8	Guaiacols/Phenols	Pentachlorophenol	WB	2	0	370	370	180	0.35
8	Guaiacols/Phenols	Phenol	WB	2	0	370	370	180	0.35
8	Metals	Aluminum	WB	2	2	140,000	190,000	170,000	35,000
8	Metals	Antimony	WB	2	0	50	51	25	0.35
8	Metals	Arsenic	WB	2	2	300	320	310	14
8	Metals	Barium	WB	2	2	3,000	3,300	3,100	230
8	Metals	Beryllium	WB	2	2	8.5	8.6	8.6	0.071
8	Metals	Cadmium	WB	2	2	95	100	98	3.5
8	Metals	Chromium	WB	2	2	530	600	570	51
8	Metals	Cobalt	WB	2	2	240	270	250	20
8	Metals	Copper	WB	2	2	920	980	950	42
8	Metals	Lead	WB	2	2	170	230	200	37
8	Metals	Manganese	WB	2	2	9,800	11,000	11,000	970
8	Metals	Mercury	WB	2	1	100	210	130	110
8	Metals	Nickel	WB	2	2	450	510	480	41
8	Metals	Selenium	WB	2	0	500	500	250	0.00
8	Metals	Silver	WB	2	0	100	100	50	0.00
8	Metals	Thallium	WB	2	0	50	51	25	0.35
8	Metals	Vanadium	WB	2	2	480	610	550	91
8	Metals	Zinc	WB	2	2	16,000	17,000	16,000	1,100
8	PCBs	Aroclor 1016	WB	2	0	19	19	9.5	0.00
8	PCBs	Aroclor 1221	WB	2	0	19	19	9.5	0.00
8	PCBs	Aroclor 1232	WB	2	0	19	19	9.5	0.00
8	PCBs	Aroclor 1242	WB	2	0	19	19	9.5	0.00
8	PCBs	Aroclor 1248	WB	2	0	19	19	9.5	0.00
8	PCBs	Aroclor 1254	WB	2	2	28	29	29	0.71
8	PCBs	Aroclor 1260	WB	2	2	21	22	22	0.71
8	PCBs	PCB 77	WB	2	2	0.046	0.056	0.051	0.0069
8	PCBs	PCB 105	WB	2	2	1.2	1.3	1.2	0.057
8	PCBs	PCB 114	WB	2	2	0.096	0.096	0.096	0.00035
8	PCBs	PCB 118	WB	2	2	2.3	2.5	2.4	0.14
8	PCBs	PCB 123	WB	2	2	0.044	0.053	0.048	0.0062
8	PCBs	PCB 126	WB	2	0	0.00096	0.0017	0.00066	0.00025
8	PCBs	PCB 156	WB	2	2	0.44	0.47	0.45	0.020
8	PCBs	PCB 157	WB	2	2	0.089	0.090	0.090	0.00028
8	PCBs	PCB 167	WB	2	2	0.19	0.20	0.19	0.0085
8	PCBs	PCB 169	WB	2	0	0.0012	0.0014	0.00066	0.000074
8	PCBs	PCB 170	WB	2	2	0.88	0.96	0.92	0.057
8	PCBs	PCB 180	WB	2	2	2.7	2.7	2.7	0.014
8	PCBs	PCB 189	WB	2	2	0.030	0.030	0.030	0.000071
8	Pesticides	Aldrin	WB	2	0	1.9	1.9	0.95	0.00
8	Pesticides	Alpha-BHC	WB	2	0	1.9	1.9	0.95	0.00
8	Pesticides	Alpha-Chlordene	WB	2	0	1.9	1.9	0.95	0.00
8	Pesticides	Beta-BHC	WB	2	0	1.9	1.9	0.95	0.00

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	2	2	0.93	1.1	1.0	0.12
8	Pesticides	cis-Nonachlor	WB	2	2	1.9	1.9	1.9	0.00
8	Pesticides	DDD-o,p'	WB	2	2	7.9	8.9	8.4	0.71
8	Pesticides	DDE-o,p'	WB	2	2	3.1	3.2	3.2	0.071
8	Pesticides	DDT-o,p'	WB	2	0	1.9	1.9	0.95	0.00
8	Pesticides	DDD-p,p'	WB	2	2	37	43	40	4.2
8	Pesticides	DDE-p,p'	WB	2	2	230	270	250	28
8	Pesticides	DDT-p,p'	WB	2	2	5.6	5.9	5.8	0.21
8	Pesticides	DDMU	WB	2	2	4.8	5.9	5.4	0.78
8	Pesticides	Delta-BHC	WB	2	0	1.9	1.9	0.95	0.00
8	Pesticides	Endosulfan Sulfate	WB	2	0	1.9	1.9	0.95	0.00
8	Pesticides	Gamma-Chlordane	WB	2	2	1.4	1.6	1.5	0.14
8	Pesticides	Gamma-Chlordene	WB	2	0	1.9	1.9	0.95	0.00
8	Pesticides	Heptachlor	WB	2	0	1.9	1.9	0.95	0.00
8	Pesticides	Heptachlor Epoxide	WB	2	0	1.9	1.9	0.95	0.00
8	Pesticides	Hexachlorobenzene	WB	2	2	2.6	2.8	2.7	0.14
8	Pesticides	Lindane	WB	2	0	1.9	1.9	0.95	0.00
8	Pesticides	Mirex	WB	2	2	0.96	1.2	1.1	0.17
8	Pesticides	Oxychlordane	WB	2	0	1.9	1.9	0.95	0.00
8	Pesticides	Pentachloroanisol	WB	2	0	1.9	1.9	0.95	0.00
8	Pesticides	Toxaphene	WB	2	0	56	57	28	0.35
8	Pesticides	trans-Nonachlor	WB	2	2	2.7	3.0	2.9	0.21
8	Semivolatiles	1,2,4-Trichlorobenzene	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	1,2-Diphenylhydrazine	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	2,4-Dinitrotoluene	WB	2	0	18	18	9.2	0.00
8	Semivolatiles	2,6-Dinitrotoluene	WB	2	0	37	37	18	0.00
8	Semivolatiles	2-Chloronaphthalene	WB	2	0	18	18	9.2	0.00
8	Semivolatiles	4-Bromophenyl-Phenylether	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	4-Chlorophenyl-Phenylether	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	Acenaphthene	WB	2	0	18	18	9.2	0.00
8	Semivolatiles	Acenaphthylene	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	Anthracene	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	Benzene, 1,2-dichloro-	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	Benzene, 1,3-dichloro-	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	Benzene, 1,4-dichloro-	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	Benzo(a)anthracene	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	Benzo(a)pyrene	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	Benzo(g,h,i)perylene	WB	2	0	18	18	9.2	0.00
8	Semivolatiles	Benzo[b]Fluoranthene	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	Benzo[k]fluoranthene	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	2	0	18	18	9.2	0.00
8	Semivolatiles	Chrysene	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	Dibenz[a,h]anthracene	WB	2	0	18	18	9.2	0.00
8	Semivolatiles	Dibenzofuran	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	Fluoranthene	WB	2	0	18	18	9.2	0.00
8	Semivolatiles	9H-Fluorene	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	Hexachlorobutadiene	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	Hexachloroethane	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	2	0	18	18	9.2	0.00
8	Semivolatiles	Naphthalene	WB	2	0	18	24	10	1.9
8	Semivolatiles	Naphthalene, 1-methyl-	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	Naphthalene, 2-methyl-	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	Nitrobenzene	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	Phenanthrene	WB	2	0	9.2	9.2	4.6	0.00
8	Semivolatiles	Pyrene	WB	2	0	18	18	9.2	0.00
8	Semivolatiles	Retene	WB	2	0	18	18	9.2	0.00
9e+	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000010	0.000040	0.000018	0.000019
9e+	Dioxin/furans	2,3,7,8-TCDD	WB	3	2	0.000010	0.000010	0.000048	0.000048
9e+	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000010	0.000040	0.000022	0.000018
9e+	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.000040	0.000090	0.000057	0.000029
9e+	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000010	0.000020	0.0000083	0.0000029
9e+	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	1	0.000010	0.000020	0.0000083	0.0000029
9e+	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	1	0.000020	0.000030	0.000017	0.000012
9e+	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000010	0.000040	0.000028	0.000020
9e+	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000020	0.000050	0.000030	0.000020
9e+	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
9e+	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000010	0.000012	0.000058	0.000058
9e+	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00011	0.00013	0.00012	0.000010
9e+	Dioxin/furans	OCDD	FS	3	3	0.00023	0.0020	0.00085	0.000096
9e+	Dioxin/furans	OCDD	WB	3	3	0.00045	0.00064	0.00054	0.000095
9e+	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.0010	0.0015	0.0012	0.00022
9e+	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.0014	0.0029	0.0020	0.00077
9e+	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	0	0.000010	0.000020	0.0000083	0.0000029
9e+	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	0	0.000020	0.000020	0.000010	0.00
9e+	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	2	0.000020	0.000050	0.000037	0.000023
9e+	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	1	0.000020	0.00012	0.000047	0.000064

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
9e+	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	1	0.000010	0.000030	0.000013	0.000014
9e+	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	1	0.000010	0.000020	0.000012	0.0000076
9e+	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
9e+	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	1	0.000010	0.000020	0.0000083	0.0000029
9e+	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	1	0.000010	0.000020	0.000010	0.0000087
9e+	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
9e+	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
9e+	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
9e+	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	1	0.000010	0.000060	0.000025	0.000030
9e+	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000010	0.000030	0.000022	0.000014
9e+	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000020	0.0000083	0.0000029
9e+	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
9e+	Dioxin/furans	OCDF	FS	3	2	0.000020	0.00011	0.000067	0.000051
9e+	Dioxin/furans	OCDF	WB	3	1	0.000010	0.000040	0.000017	0.000020
9e+	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	480	960	400	140
9e+	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	860	990	470	36
9e+	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	480	960	400	140
9e+	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	860	990	470	36
9e+	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	480	960	400	140
9e+	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	860	990	470	36
9e+	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	480	960	400	140
9e+	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	860	990	470	36
9e+	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	480	960	400	140
9e+	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	860	990	470	36
9e+	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	190	380	160	54
9e+	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	340	400	190	14
9e+	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	480	960	400	140
9e+	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	860	990	470	36
9e+	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	190	380	160	54
9e+	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	340	400	190	14
9e+	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	190	380	160	54
9e+	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	340	400	190	14
9e+	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	190	380	160	54
9e+	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	340	400	190	14
9e+	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	190	380	160	54
9e+	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	340	400	190	14
9e+	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	480	960	400	140
9e+	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	860	990	470	36
9e+	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	190	380	160	54
9e+	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	340	400	190	14
9e+	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	190	380	160	54
9e+	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	340	400	190	14
9e+	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	190	380	160	54
9e+	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	340	400	190	14
9e+	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	190	380	160	54
9e+	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	340	400	190	14
9e+	Guaiacols/Phenols	Phenol	FS	3	0	190	380	160	54
9e+	Guaiacols/Phenols	Phenol	WB	3	0	340	400	190	14
9e+	Metals	Aluminum	FS	3	1	1,000	3,800	1,600	1,900
9e+	Metals	Aluminum	WB	3	3	85,000	130,000	99,000	24,000
9e+	Metals	Antimony	FS	3	0	50	50	25	0.00
9e+	Metals	Antimony	WB	3	0	50	50	25	0.00
9e+	Metals	Arsenic	FS	3	3	54	86	65	18
9e+	Metals	Arsenic	WB	3	3	200	260	220	35
9e+	Metals	Barium	FS	3	3	810	980	920	98
9e+	Metals	Barium	WB	3	3	4,100	4,700	4,400	320
9e+	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
9e+	Metals	Beryllium	WB	3	2	4.0	5.4	4.1	1.9
9e+	Metals	Cadmium	FS	3	3	14	24	18	5.3
9e+	Metals	Cadmium	WB	3	3	180	250	220	33
9e+	Metals	Chromium	FS	3	3	360	380	370	12
9e+	Metals	Chromium	WB	3	3	500	520	510	12
9e+	Metals	Cobalt	FS	3	3	20	250	160	120
9e+	Metals	Cobalt	WB	3	3	170	220	200	24
9e+	Metals	Copper	FS	3	3	430	440	440	5.8
9e+	Metals	Copper	WB	3	3	1,500	5,600	2,800	2,400
9e+	Metals	Lead	FS	3	2	10	140	88	72
9e+	Metals	Lead	WB	3	3	510	1,100	730	300
9e+	Metals	Manganese	FS	3	3	3,700	5,400	4,500	820
9e+	Metals	Manganese	WB	3	3	18,000	21,000	19,000	1,400
9e+	Metals	Mercury	FS	3	3	150	220	190	35
9e+	Metals	Mercury	WB	3	3	85	140	110	28
9e+	Metals	Nickel	FS	3	2	30	510	300	260
9e+	Metals	Nickel	WB	3	3	3,000	11,000	5,600	4,200
9e+	Metals	Selenium	FS	3	3	250	300	280	26
9e+	Metals	Selenium	WB	3	3	330	390	360	31

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
9e+	Metals	Silver	FS	3	0	100	100	50	0.00
9e+	Metals	Silver	WB	3	0	100	100	50	0.00
9e+	Metals	Thallium	FS	3	0	50	50	25	0.00
9e+	Metals	Thallium	WB	3	0	50	50	25	0.00
9e+	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
9e+	Metals	Vanadium	WB	3	3	320	430	370	57
9e+	Metals	Zinc	FS	3	3	24,000	26,000	25,000	1,200
9e+	Metals	Zinc	WB	3	3	33,000	38,000	36,000	2,700
9e+	PCBs	Aroclor 1016	FS	3	0	19	20	9.7	0.29
9e+	PCBs	Aroclor 1016	WB	3	0	19	20	9.8	0.29
9e+	PCBs	Aroclor 1221	FS	3	0	19	20	9.7	0.29
9e+	PCBs	Aroclor 1221	WB	3	0	19	20	9.8	0.29
9e+	PCBs	Aroclor 1232	FS	3	0	19	20	9.7	0.29
9e+	PCBs	Aroclor 1232	WB	3	0	19	20	9.8	0.29
9e+	PCBs	Aroclor 1242	FS	3	0	19	20	9.7	0.29
9e+	PCBs	Aroclor 1242	WB	3	0	19	20	9.8	0.29
9e+	PCBs	Aroclor 1248	FS	3	0	19	20	9.7	0.29
9e+	PCBs	Aroclor 1248	WB	3	0	19	20	9.8	0.29
9e+	PCBs	Aroclor 1254	FS	3	3	19	41	31	11
9e+	PCBs	Aroclor 1254	WB	3	3	38	65	48	15
9e+	PCBs	Aroclor 1260	FS	3	3	28	54	38	14
9e+	PCBs	Aroclor 1260	WB	3	3	32	100	77	39
9e+	PCBs	PCB 77	FS	3	3	0.032	0.042	0.035	0.0056
9e+	PCBs	PCB 77	WB	3	3	0.054	0.11	0.074	0.029
9e+	PCBs	PCB 105	FS	3	3	1.6	3.0	2.3	0.74
9e+	PCBs	PCB 105	WB	3	3	2.7	6.5	4.2	2.0
9e+	PCBs	PCB 114	FS	3	3	0.13	0.28	0.21	0.072
9e+	PCBs	PCB 114	WB	3	3	0.23	0.54	0.37	0.16
9e+	PCBs	PCB 118	FS	3	3	3.4	6.6	5.1	1.6
9e+	PCBs	PCB 118	WB	3	3	6.0	14	9.3	4.4
9e+	PCBs	PCB 123	FS	3	3	0.059	0.13	0.095	0.036
9e+	PCBs	PCB 123	WB	3	3	0.11	0.25	0.16	0.073
9e+	PCBs	PCB 126	FS	3	3	0.0070	0.013	0.0094	0.0030
9e+	PCBs	PCB 126	WB	3	3	0.013	0.021	0.016	0.0043
9e+	PCBs	PCB 156	FS	3	3	0.71	1.4	1.1	0.33
9e+	PCBs	PCB 156	WB	3	3	1.0	2.7	1.8	0.83
9e+	PCBs	PCB 157	FS	3	3	0.14	0.27	0.21	0.068
9e+	PCBs	PCB 157	WB	3	3	0.20	0.53	0.35	0.16
9e+	PCBs	PCB 167	FS	3	3	0.28	0.60	0.45	0.16
9e+	PCBs	PCB 167	WB	3	3	0.45	1.2	0.80	0.36
9e+	PCBs	PCB 169	FS	3	0	0.0013	0.0024	0.00086	0.00031
9e+	PCBs	PCB 169	WB	3	0	0.0013	0.0023	0.00085	0.00026
9e+	PCBs	PCB 170	FS	3	3	1.00	2.5	1.8	0.76
9e+	PCBs	PCB 170	WB	3	3	1.6	5.2	3.7	1.9
9e+	PCBs	PCB 180	FS	3	3	3.2	7.7	5.5	2.2
9e+	PCBs	PCB 180	WB	3	3	4.7	17	11	6.0
9e+	PCBs	PCB 189	FS	3	3	0.061	0.11	0.089	0.026
9e+	PCBs	PCB 189	WB	3	3	0.077	0.20	0.15	0.066
9e+	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.97	0.029
9e+	Pesticides	Aldrin	WB	3	0	1.9	2.0	0.98	0.029
9e+	Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.97	0.029
9e+	Pesticides	Alpha-BHC	WB	3	0	1.9	2.0	0.98	0.029
9e+	Pesticides	Alpha-Chlordene	FS	3	0	1.9	2.0	0.97	0.029
9e+	Pesticides	Alpha-Chlordene	WB	3	0	1.9	2.0	0.98	0.029
9e+	Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.97	0.029
9e+	Pesticides	Beta-BHC	WB	3	0	1.9	2.0	0.98	0.029
9e+	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.9	2.0	0.97	0.029
9e+	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.9	2.0	0.98	0.029
9e+	Pesticides	cis-Nonachlor	FS	3	0	1.9	2.0	0.97	0.029
9e+	Pesticides	cis-Nonachlor	WB	3	0	1.9	2.0	0.98	0.029
9e+	Pesticides	DDD-o,p'	FS	3	3	2.0	4.2	3.0	1.1
9e+	Pesticides	DDD-o,p'	WB	3	3	3.6	15	7.9	6.2
9e+	Pesticides	DDE-o,p'	FS	3	3	3.2	5.0	4.0	0.92
9e+	Pesticides	DDE-o,p'	WB	3	3	4.5	12	7.3	4.1
9e+	Pesticides	DDT-o,p'	FS	3	0	1.9	2.0	0.97	0.029
9e+	Pesticides	DDT-o,p'	WB	3	0	1.9	2.0	0.98	0.029
9e+	Pesticides	DDD-p,p'	FS	3	2	2.0	42	26	22
9e+	Pesticides	DDD-p,p'	WB	3	2	2.0	130	56	66
9e+	Pesticides	DDE-p,p'	FS	3	3	260	390	320	66
9e+	Pesticides	DDE-p,p'	WB	3	3	360	830	540	250
9e+	Pesticides	DDT-p,p'	FS	3	3	6.3	29	20	12
9e+	Pesticides	DDT-p,p'	WB	3	3	14	52	29	20
9e+	Pesticides	DDMU	FS	3	3	5.5	9.4	7.4	2.0
9e+	Pesticides	DDMU	WB	3	3	10	24	15	7.8
9e+	Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.97	0.029
9e+	Pesticides	Delta-BHC	WB	3	0	1.9	2.0	0.98	0.029

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
9e+	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	0.00	na
9e+	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	0.00	na
9e+	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.0	0.97	0.029
9e+	Pesticides	Gamma-Chlordane	WB	3	0	1.9	2.0	0.98	0.029
9e+	Pesticides	Gamma-Chlordene	FS	3	0	1.9	2.0	0.97	0.029
9e+	Pesticides	Gamma-Chlordene	WB	3	0	1.9	2.0	0.98	0.029
9e+	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.97	0.029
9e+	Pesticides	Heptachlor	WB	3	0	1.9	2.0	0.98	0.029
9e+	Pesticides	Heptachlor Epoxide	FS	3	0	0.00	1.9	0.95	na
9e+	Pesticides	Heptachlor Epoxide	WB	3	0	0.00	0.00	0.00	na
9e+	Pesticides	Hexachlorobenzene	FS	3	0	1.9	2.0	0.97	0.029
9e+	Pesticides	Hexachlorobenzene	WB	3	1	1.3	2.0	1.1	0.17
9e+	Pesticides	Lindane	FS	3	0	1.9	2.0	0.97	0.029
9e+	Pesticides	Lindane	WB	3	0	1.9	2.0	0.98	0.029
9e+	Pesticides	Mirex	FS	3	0	1.9	2.0	0.97	0.029
9e+	Pesticides	Mirex	WB	3	0	1.9	2.0	0.98	0.029
9e+	Pesticides	Oxychlordane	FS	3	0	1.9	2.0	0.97	0.029
9e+	Pesticides	Oxychlordane	WB	3	0	1.9	2.0	0.98	0.029
9e+	Pesticides	Pentachloroanisol	FS	3	0	1.9	2.0	0.97	0.029
9e+	Pesticides	Pentachloroanisol	WB	3	0	1.9	2.0	0.98	0.029
9e+	Pesticides	Toxaphene	FS	3	0	58	59	29	0.29
9e+	Pesticides	Toxaphene	WB	3	0	56	59	29	0.87
9e+	Pesticides	trans-Nonachlor	FS	3	0	1.9	2.0	0.97	0.029
9e+	Pesticides	trans-Nonachlor	WB	3	3	1.2	2.4	1.6	0.69
9e+	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	9.6	19	7.9	2.7
9e+	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	17	20	9.4	0.72
9e+	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	19	38	16	5.4
9e+	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	34	40	19	1.4
9e+	Semivolatiles	2-Chloronaphthalene	FS	3	0	9.6	19	7.9	2.7
9e+	Semivolatiles	2-Chloronaphthalene	WB	3	0	17	20	9.4	0.72
9e+	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	Acenaphthene	FS	3	0	9.6	19	7.9	2.7
9e+	Semivolatiles	Acenaphthene	WB	3	0	17	20	9.4	0.72
9e+	Semivolatiles	Acenaphthylene	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	Acenaphthylene	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	Anthracene	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	Anthracene	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	Benzo(a)anthracene	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	Benzo(a)pyrene	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	9.6	19	7.9	2.7
9e+	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	17	20	9.4	0.72
9e+	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	19	19	9.5	0.14
9e+	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	17	20	9.4	0.72
9e+	Semivolatiles	Chrysene	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	Chrysene	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	9.6	19	7.9	2.7
9e+	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	17	20	9.4	0.72
9e+	Semivolatiles	Dibenzofuran	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	Dibenzofuran	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	Fluoranthene	FS	3	0	9.6	19	7.9	2.7
9e+	Semivolatiles	Fluoranthene	WB	3	0	17	20	9.4	0.72
9e+	Semivolatiles	9H-Fluorene	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	9H-Fluorene	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	Hexachlorobutadiene	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	Hexachloroethane	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	Hexachloroethane	WB	3	0	8.6	9.9	4.7	0.36

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
9e+	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	9.6	19	7.9	2.7
9e+	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	17	20	9.4	0.72
9e+	Semivolatiles	Naphthalene	FS	3	0	18	27	11	2.2
9e+	Semivolatiles	Naphthalene	WB	3	0	19	21	9.8	0.53
9e+	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	Nitrobenzene	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	Nitrobenzene	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	Phenanthrene	FS	3	0	4.8	9.6	4.0	1.4
9e+	Semivolatiles	Phenanthrene	WB	3	0	8.6	9.9	4.7	0.36
9e+	Semivolatiles	Pyrene	FS	3	0	9.6	19	7.9	2.7
9e+	Semivolatiles	Pyrene	WB	3	0	17	20	9.4	0.72
9e+	Semivolatiles	Retene	FS	3	0	9.6	19	7.9	2.7
9e+	Semivolatiles	Retene	WB	3	0	17	20	9.4	0.72
13	Dioxin/furans	2,3,7,8-TCDD	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
13	Dioxin/furans	2,3,7,8-TCDD	WB	3	1	0.000020	0.000030	0.000018	0.000010
13	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000010	0.000040	0.000022	0.000018
13	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	1	0.000020	0.000030	0.000018	0.000010
13	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000010	0.000010	0.0000050	0.00
13	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	2	0.000010	0.000020	0.000015	0.0000087
13	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	2	0.000010	0.000040	0.000022	0.000018
13	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
13	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000010	0.000020	0.000015	0.0000087
13	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	3	0.000020	0.000030	0.000023	0.0000058
13	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000010	0.000010	0.0000058	0.000049
13	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	2	0.000030	0.000035	0.000020	0.00017
13	Dioxin/furans	OCDD	FS	3	2	0.000010	0.000015	0.0000092	0.000077
13	Dioxin/furans	OCDD	WB	3	3	0.0013	0.0026	0.0017	0.00072
13	Dioxin/furans	2,3,7,8-TCDF	FS	3	2	0.000010	0.000011	0.0000075	0.000061
13	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.000080	0.00028	0.00021	0.00011
13	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
13	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	0	0.000020	0.000050	0.000015	0.0000087
13	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	1	0.000010	0.000020	0.000012	0.0000076
13	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	1	0.000020	0.000050	0.000018	0.0000076
13	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	1	0.000010	0.000010	0.0000067	0.0000029
13	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	0	0.000010	0.000040	0.000012	0.0000076
13	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
13	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	0	0.000010	0.000040	0.000012	0.0000076
13	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	1	0.000010	0.000010	0.0000067	0.0000029
13	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000040	0.000012	0.0000076
13	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
13	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	0	0.000010	0.000040	0.000012	0.0000076
13	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
13	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000010	0.000050	0.000013	0.000010
13	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
13	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000050	0.000013	0.000010
13	Dioxin/furans	OCDF	FS	3	0	0.000020	0.000040	0.000015	0.0000050
13	Dioxin/furans	OCDF	WB	3	2	0.000010	0.000051	0.000022	0.000026
13	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	840	920	440	21
13	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	880	1,000	470	30
13	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	840	920	440	21
13	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	880	1,000	470	30
13	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	840	920	440	21
13	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	880	1,000	470	30
13	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	840	920	440	21
13	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	880	1,000	470	30
13	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	840	920	440	21
13	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	880	1,000	470	30
13	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	340	370	180	8.3
13	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	350	400	190	12
13	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	840	920	440	21
13	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	880	1,000	470	30
13	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	340	370	180	8.3
13	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	350	400	190	12
13	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	340	370	180	8.3
13	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	350	400	190	12
13	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	340	370	180	8.3
13	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	350	400	190	12
13	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	340	370	180	8.3
13	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	350	400	190	12
13	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	840	920	440	21
13	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	880	1,000	470	30
13	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	340	370	180	8.3
13	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	350	400	190	12

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
13	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	340	370	180	8.3
13	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	350	400	190	12
13	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	340	370	180	8.3
13	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	350	400	190	12
13	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	340	370	180	8.3
13	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	350	400	190	12
13	Guaiacols/Phenols	Phenol	FS	3	0	340	370	180	8.3
13	Guaiacols/Phenols	Phenol	WB	3	0	350	400	190	12
13	Metals	Aluminum	FS	3	3	710	4,200	2,000	1,900
13	Metals	Aluminum	WB	3	3	110,000	140,000	120,000	13,000
13	Metals	Antimony	FS	3	0	50	50	25	0.00
13	Metals	Antimony	WB	3	0	50	50	25	0.00
13	Metals	Arsenic	FS	3	3	82	100	89	9.9
13	Metals	Arsenic	WB	3	3	200	270	230	35
13	Metals	Barium	FS	3	3	850	1,600	1,400	440
13	Metals	Barium	WB	3	3	2,900	3,500	3,200	320
13	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
13	Metals	Beryllium	WB	3	3	5.7	6.6	6.0	0.52
13	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
13	Metals	Cadmium	WB	3	3	35	42	39	3.6
13	Metals	Chromium	FS	3	2	100	150	110	51
13	Metals	Chromium	WB	3	3	390	490	440	50
13	Metals	Cobalt	FS	3	3	51	120	93	37
13	Metals	Cobalt	WB	3	3	300	400	330	58
13	Metals	Copper	FS	3	3	430	550	480	64
13	Metals	Copper	WB	3	3	910	1,300	1,100	190
13	Metals	Lead	FS	3	3	17	25	22	4.4
13	Metals	Lead	WB	3	3	86	110	99	14
13	Metals	Manganese	FS	3	3	2,300	3,100	2,700	450
13	Metals	Manganese	WB	3	3	14,000	18,000	16,000	2,100
13	Metals	Mercury	FS	3	3	340	370	360	15
13	Metals	Mercury	WB	3	3	180	200	190	12
13	Metals	Nickel	FS	3	3	36	63	46	15
13	Metals	Nickel	WB	3	3	420	460	440	25
13	Metals	Selenium	FS	3	3	270	400	350	72
13	Metals	Selenium	WB	3	3	380	450	420	38
13	Metals	Silver	FS	3	0	100	100	50	0.00
13	Metals	Silver	WB	3	0	100	100	50	0.00
13	Metals	Thallium	FS	3	0	50	50	25	0.00
13	Metals	Thallium	WB	3	0	50	50	25	0.00
13	Metals	Vanadium	FS	3	3	14	16	15	1.2
13	Metals	Vanadium	WB	3	3	400	500	440	53
13	Metals	Zinc	FS	3	3	17,000	20,000	19,000	1,500
13	Metals	Zinc	WB	3	3	22,000	25,000	24,000	1,800
13	PCBs	Aroclor 1016	FS	3	0	19	20	9.8	0.29
13	PCBs	Aroclor 1016	WB	3	0	20	20	10	0.00
13	PCBs	Aroclor 1221	FS	3	0	19	20	9.8	0.29
13	PCBs	Aroclor 1221	WB	3	0	20	20	10	0.00
13	PCBs	Aroclor 1232	FS	3	0	19	20	9.8	0.29
13	PCBs	Aroclor 1232	WB	3	0	20	20	10	0.00
13	PCBs	Aroclor 1242	FS	3	0	19	20	9.8	0.29
13	PCBs	Aroclor 1242	WB	3	0	20	20	10	0.00
13	PCBs	Aroclor 1248	FS	3	0	19	20	9.8	0.29
13	PCBs	Aroclor 1248	WB	3	0	20	20	10	0.00
13	PCBs	Aroclor 1254	FS	3	0	19	20	9.8	0.29
13	PCBs	Aroclor 1254	WB	3	1	14	20	11	2.3
13	PCBs	Aroclor 1260	FS	3	0	19	20	9.8	0.29
13	PCBs	Aroclor 1260	WB	3	0	20	20	10	0.00
13	PCBs	PCB 77	FS	3	3	0.0037	0.0062	0.0051	0.0013
13	PCBs	PCB 77	WB	3	3	0.0043	0.012	0.0092	0.0043
13	PCBs	PCB 105	FS	3	3	0.15	0.17	0.16	0.015
13	PCBs	PCB 105	WB	3	3	0.19	0.32	0.27	0.069
13	PCBs	PCB 114	FS	3	3	0.012	0.016	0.014	0.0017
13	PCBs	PCB 114	WB	3	3	0.018	0.025	0.022	0.0041
13	PCBs	PCB 118	FS	3	3	0.36	0.43	0.40	0.038
13	PCBs	PCB 118	WB	3	3	0.50	0.75	0.65	0.13
13	PCBs	PCB 123	FS	3	3	0.0055	0.0075	0.0067	0.0011
13	PCBs	PCB 123	WB	3	3	0.0079	0.013	0.011	0.0024
13	PCBs	PCB 126	FS	3	0	0.00063	0.00093	0.00039	0.000075
13	PCBs	PCB 126	WB	3	0	0.00080	0.0013	0.00048	0.00013
13	PCBs	PCB 156	FS	3	3	0.085	0.10	0.097	0.010
13	PCBs	PCB 156	WB	3	3	0.12	0.16	0.14	0.018
13	PCBs	PCB 157	FS	3	3	0.015	0.018	0.017	0.0016
13	PCBs	PCB 157	WB	3	3	0.023	0.030	0.028	0.0043
13	PCBs	PCB 167	FS	3	3	0.039	0.050	0.045	0.0058
13	PCBs	PCB 167	WB	3	3	0.052	0.073	0.063	0.010

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
13	PCBs	PCB 169	FS	3	1	0.0020	0.089	0.030	0.051
13	PCBs	PCB 169	WB	3	0	0.0023	0.0040	0.0015	0.00047
13	PCBs	PCB 170	FS	3	3	0.17	0.21	0.18	0.021
13	PCBs	PCB 170	WB	3	3	0.18	0.25	0.22	0.034
13	PCBs	PCB 180	FS	3	3	0.54	0.66	0.60	0.062
13	PCBs	PCB 180	WB	3	3	0.59	0.85	0.73	0.13
13	PCBs	PCB 189	FS	3	3	0.0079	0.0099	0.0086	0.0011
13	PCBs	PCB 189	WB	3	3	0.0080	0.012	0.0100	0.0018
13	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.98	0.029
13	Pesticides	Aldrin	WB	3	0	2.0	2.0	1.0	0.00
13	Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.98	0.029
13	Pesticides	Alpha-BHC	WB	3	0	2.0	2.0	1.0	0.00
13	Pesticides	Alpha-Chlordene	FS	3	0	1.9	2.0	0.98	0.029
13	Pesticides	Alpha-Chlordene	WB	3	0	2.0	2.0	1.0	0.00
13	Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.98	0.029
13	Pesticides	Beta-BHC	WB	3	0	2.0	2.0	1.0	0.00
13	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.9	2.0	0.98	0.029
13	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	2.0	2.0	1.0	0.00
13	Pesticides	cis-Nonachlor	FS	3	0	1.9	2.0	0.98	0.029
13	Pesticides	cis-Nonachlor	WB	3	0	2.0	2.0	1.0	0.00
13	Pesticides	DDD-o,p'	FS	3	1	1.5	2.0	1.2	0.30
13	Pesticides	DDD-o,p'	WB	3	2	2.0	3.2	2.2	1.1
13	Pesticides	DDE-o,p'	FS	3	1	1.2	2.0	1.1	0.13
13	Pesticides	DDE-o,p'	WB	3	2	1.2	2.0	1.2	0.20
13	Pesticides	DDT-o,p'	FS	3	1	1.9	5.3	2.4	2.5
13	Pesticides	DDT-o,p'	WB	3	2	1.2	2.0	1.2	0.20
13	Pesticides	DDD-p,p'	FS	3	2	2.0	3.9	2.5	1.5
13	Pesticides	DDD-p,p'	WB	3	3	1.9	9.6	5.9	3.9
13	Pesticides	DDE-p,p'	FS	3	3	44	72	62	16
13	Pesticides	DDE-p,p'	WB	3	3	53	94	78	22
13	Pesticides	DDT-p,p'	FS	3	3	1.5	2.4	2.0	0.47
13	Pesticides	DDT-p,p'	WB	3	3	2.5	8.1	5.6	2.8
13	Pesticides	DDMU	FS	3	2	1.9	6.4	3.2	2.8
13	Pesticides	DDMU	WB	3	2	2.0	3.0	2.3	1.1
13	Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.98	0.029
13	Pesticides	Delta-BHC	WB	3	0	2.0	2.0	1.0	0.00
13	Pesticides	Endosulfan Sulfate	FS	3	0	1.9	2.0	0.98	0.029
13	Pesticides	Endosulfan Sulfate	WB	3	0	2.0	2.0	1.0	0.00
13	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
13	Pesticides	Gamma-Chlordane	WB	3	0	2.0	2.0	1.0	0.00
13	Pesticides	Gamma-Chlordene	FS	3	0	1.9	2.0	0.98	0.029
13	Pesticides	Gamma-Chlordene	WB	3	0	2.0	2.0	1.0	0.00
13	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.98	0.029
13	Pesticides	Heptachlor	WB	3	0	2.0	2.0	1.0	0.00
13	Pesticides	Heptachlor Epoxide	FS	3	0	1.9	2.0	0.98	0.029
13	Pesticides	Heptachlor Epoxide	WB	3	0	2.0	2.0	1.0	0.00
13	Pesticides	Hexachlorobenzene	FS	3	0	1.9	2.0	0.98	0.029
13	Pesticides	Hexachlorobenzene	WB	3	0	2.0	2.0	1.0	0.00
13	Pesticides	Lindane	FS	3	0	1.9	2.0	0.98	0.029
13	Pesticides	Lindane	WB	3	0	2.0	2.0	1.0	0.00
13	Pesticides	Mirex	FS	3	0	1.9	2.0	0.98	0.029
13	Pesticides	Mirex	WB	3	0	2.0	2.0	1.0	0.00
13	Pesticides	Oxychlordane	FS	3	0	1.9	2.0	0.98	0.029
13	Pesticides	Oxychlordane	WB	3	0	2.0	2.0	1.0	0.00
13	Pesticides	Pentachloroanisol	FS	3	0	1.9	2.0	0.98	0.029
13	Pesticides	Pentachloroanisol	WB	3	0	2.0	2.0	1.0	0.00
13	Pesticides	Toxaphene	FS	3	0	58	60	30	0.50
13	Pesticides	Toxaphene	WB	3	0	59	59	30	0.00
13	Pesticides	trans-Nonachlor	FS	3	0	1.9	2.0	0.98	0.029
13	Pesticides	trans-Nonachlor	WB	3	1	1.2	2.0	1.1	0.12
13	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	8.4	9.2	4.4	0.20
13	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	8.4	9.2	4.4	0.20
13	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	17	19	8.9	0.43
13	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	18	20	9.4	0.61
13	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	34	37	18	0.83
13	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	35	40	19	1.2
13	Semivolatiles	2-Chloronaphthalene	FS	3	0	17	19	8.9	0.43
13	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	20	9.4	0.61
13	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	8.4	9.2	4.4	0.20
13	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	8.4	9.2	4.4	0.20
13	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	Acenaphthene	FS	3	0	17	19	8.9	0.43
13	Semivolatiles	Acenaphthene	WB	3	0	18	20	9.4	0.61

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
13	Semivolatiles	Acenaphthylene	FS	3	0	8.4	9.2	4.4	0.20
13	Semivolatiles	Acenaphthylene	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	Anthracene	FS	3	0	8.4	9.2	4.4	0.20
13	Semivolatiles	Anthracene	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	8.4	9.2	4.4	0.20
13	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	8.4	9.2	4.4	0.20
13	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	8.4	9.2	4.4	0.20
13	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	Benzo(a)anthracene	FS	3	1	7.2	9.2	5.3	1.6
13	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	Benzo(a)pyrene	FS	3	1	6.8	9.2	5.2	1.4
13	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	Benzo(g,h,i)perylene	FS	3	1	17	21	13	6.8
13	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	20	9.4	0.61
13	Semivolatiles	Benzo[b]Fluoranthene	FS	3	1	8.4	15	7.8	6.0
13	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	Benzo[k]fluoranthene	FS	3	1	8.4	9.8	6.2	3.1
13	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	17	19	8.9	0.43
13	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	20	9.4	0.61
13	Semivolatiles	Chrysene	FS	3	1	8.4	10	6.3	3.4
13	Semivolatiles	Chrysene	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	Dibenz[a,h]anthracene	FS	3	1	17	23	13	8.1
13	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	20	9.4	0.61
13	Semivolatiles	Dibenzofuran	FS	3	0	8.4	9.2	4.4	0.20
13	Semivolatiles	Dibenzofuran	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	Fluoranthene	FS	3	0	17	19	8.9	0.43
13	Semivolatiles	Fluoranthene	WB	3	0	18	20	9.4	0.61
13	Semivolatiles	9H-Fluorene	FS	3	0	8.4	9.2	4.4	0.20
13	Semivolatiles	9H-Fluorene	WB	3	1	8.8	10	6.2	2.7
13	Semivolatiles	Hexachlorobutadiene	FS	3	0	8.4	9.2	4.4	0.20
13	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	Hexachloroethane	FS	3	0	8.4	9.2	4.4	0.20
13	Semivolatiles	Hexachloroethane	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	1	17	25	14	9.2
13	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	20	9.4	0.61
13	Semivolatiles	Naphthalene	FS	3	0	11	17	6.8	1.6
13	Semivolatiles	Naphthalene	WB	3	0	17	24	10	1.8
13	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	8.4	9.2	4.4	0.20
13	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	8.4	9.2	4.4	0.20
13	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	10	25	9.4	3.9
13	Semivolatiles	Nitrobenzene	FS	3	0	8.4	9.2	4.4	0.20
13	Semivolatiles	Nitrobenzene	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	Phenanthrene	FS	3	0	8.4	9.2	4.4	0.20
13	Semivolatiles	Phenanthrene	WB	3	0	8.8	10	4.7	0.31
13	Semivolatiles	Pyrene	FS	3	0	17	19	8.9	0.43
13	Semivolatiles	Pyrene	WB	3	0	8.8	20	7.9	3.0
13	Semivolatiles	Retene	FS	3	0	17	19	8.9	0.43
13	Semivolatiles	Retene	WB	3	0	18	20	9.4	0.61
30	Dioxin/furans	2,3,7,8-TCDD	FS	4	3	0.000010	0.000070	0.000049	0.000030
30	Dioxin/furans	2,3,7,8-TCDD	WB	3	2	0.000010	0.000080	0.000048	0.000039
30	Dioxin/furans	1,2,3,7,8-PeCDD	FS	4	4	0.00011	0.00016	0.00013	0.000022
30	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.00012	0.00013	0.00012	0.0000058
30	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	4	4	0.000090	0.00015	0.00011	0.000026
30	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	3	0.000090	0.00010	0.000097	0.0000058
30	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	4	2	0.000010	0.00011	0.000045	0.000050
30	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000010	0.000070	0.000042	0.000033
30	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	4	2	0.000010	0.000080	0.000035	0.000037
30	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	3	0.000030	0.000050	0.000043	0.000012
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	4	4	0.00011	0.00020	0.00015	0.000040
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	2	0.000010	0.00020	0.00012	0.00010
30	Dioxin/furans	OCDD	FS	4	4	0.00016	0.00031	0.00022	0.000063
30	Dioxin/furans	OCDD	WB	3	3	0.00036	0.00063	0.00050	0.00014
30	Dioxin/furans	2,3,7,8-TCDF	FS	4	4	0.00015	0.00058	0.00030	0.00019
30	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00028	0.00052	0.00042	0.00012
30	Dioxin/furans	1,2,3,7,8-PeCDF	FS	4	3	0.000010	0.000040	0.000029	0.000017
30	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.000030	0.000040	0.000037	0.0000058
30	Dioxin/furans	2,3,4,7,8-PeCDF	FS	4	4	0.000030	0.000070	0.000040	0.000020
30	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.000030	0.000050	0.000043	0.000012
30	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	4	2	0.000010	0.000080	0.000030	0.000035
30	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	2	0.000010	0.000020	0.000015	0.0000087
30	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	4	3	0.000010	0.000080	0.000039	0.000031
30	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	3	0.000020	0.000040	0.000030	0.000010

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	4	3	0.000010	0.00017	0.000086	0.000068
30	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	3	0.000050	0.000080	0.000067	0.000015
30	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	4	3	0.000010	0.00021	0.00013	0.000088
30	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00012	0.00015	0.00014	0.000015
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	4	3	0.000010	0.00016	0.000094	0.000065
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	3	0.000060	0.00010	0.000087	0.000023
30	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	4	1	0.000010	0.00013	0.000036	0.000063
30	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	OCDF	FS	4	4	0.000020	0.00022	0.000095	0.000087
30	Dioxin/furans	OCDF	WB	3	2	0.000010	0.00010	0.000055	0.000048
30	Guaiacols/Phenols	4-Chloroguaiacol	FS	4	0	470	520	250	13
30	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	470	1,000	340	140
30	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	4	0	470	520	250	13
30	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	470	1,000	340	140
30	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	4	0	470	520	250	13
30	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	470	1,000	340	140
30	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	4	0	470	520	250	13
30	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	470	1,000	340	140
30	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	4	0	470	520	250	13
30	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	470	1,000	340	140
30	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	4	0	190	210	100	5.0
30	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	190	400	140	57
30	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	4	0	470	520	250	13
30	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	470	1,000	340	140
30	Guaiacols/Phenols	Tetrachloroguaiacol	FS	4	0	190	210	100	5.0
30	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	190	400	140	57
30	Guaiacols/Phenols	2-Chlorophenol	FS	4	0	190	210	100	5.0
30	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	190	400	140	57
30	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	4	0	190	210	100	5.0
30	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	190	400	140	57
30	Guaiacols/Phenols	2,4-Dichlorophenol	FS	4	0	190	210	100	5.0
30	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	190	400	140	57
30	Guaiacols/Phenols	2,4-Dimethylphenol	FS	4	0	470	520	250	13
30	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	470	1,000	340	140
30	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	200	210	100	3.6
30	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	4	0	190	210	100	5.0
30	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	190	400	140	57
30	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	200	210	100	3.6
30	Guaiacols/Phenols	Pentachlorophenol	FS	4	0	190	210	100	5.0
30	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	190	400	140	57
30	Guaiacols/Phenols	Phenol	FS	4	0	190	210	100	5.0
30	Guaiacols/Phenols	Phenol	WB	3	0	190	400	140	57
30	Metals	Aluminum	FS	4	4	1,400	4,600	2,900	1,600
30	Metals	Aluminum	WB	3	3	48,000	55,000	52,000	3,700
30	Metals	Antimony	FS	4	0	50	50	25	0.00
30	Metals	Antimony	WB	3	0	50	50	25	0.00
30	Metals	Arsenic	FS	4	4	55	100	81	19
30	Metals	Arsenic	WB	3	3	110	150	130	20
30	Metals	Barium	FS	4	4	550	1,100	740	230
30	Metals	Barium	WB	3	3	2,000	2,200	2,100	72
30	Metals	Beryllium	FS	4	2	4.0	4.5	3.2	1.4
30	Metals	Beryllium	WB	3	0	10	10	5.0	0.00
30	Metals	Cadmium	FS	4	1	4.0	4.0	2.5	1.0
30	Metals	Cadmium	WB	3	3	18	20	19	1.2
30	Metals	Chromium	FS	4	1	100	130	70	40
30	Metals	Chromium	WB	3	3	130	150	140	12
30	Metals	Cobalt	FS	4	4	17	42	25	12
30	Metals	Cobalt	WB	3	3	69	75	72	3.1
30	Metals	Copper	FS	4	4	480	810	570	160
30	Metals	Copper	WB	3	3	1,000	1,400	1,200	220
30	Metals	Lead	FS	4	4	16	40	24	11
30	Metals	Lead	WB	3	3	35	44	39	4.5
30	Metals	Manganese	FS	4	4	1,800	2,500	2,100	380
30	Metals	Manganese	WB	3	3	8,300	10,000	9,000	1,100
30	Metals	Mercury	FS	4	4	230	280	260	22
30	Metals	Mercury	WB	3	3	58	64	60	3.2
30	Metals	Nickel	FS	4	4	85	170	130	36
30	Metals	Nickel	WB	3	3	380	510	430	67
30	Metals	Selenium	FS	4	4	250	310	280	28
30	Metals	Selenium	WB	3	3	300	340	320	20
30	Metals	Silver	FS	4	0	100	100	50	0.00
30	Metals	Silver	WB	3	0	100	100	50	0.00
30	Metals	Thallium	FS	4	0	50	50	25	0.00
30	Metals	Thallium	WB	3	0	50	50	25	0.00
30	Metals	Vanadium	FS	4	4	11	22	15	4.9
30	Metals	Vanadium	WB	3	3	270	330	300	31

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Metals	Zinc	FS	4	4	16,000	18,000	17,000	900
30	Metals	Zinc	WB	3	3	19,000	20,000	19,000	350
30	PCBs	Aroclor 1016	FS	4	0	18	19	9.3	0.29
30	PCBs	Aroclor 1016	WB	3	0	18	21	9.8	0.76
30	PCBs	Aroclor 1221	FS	4	0	18	19	9.3	0.29
30	PCBs	Aroclor 1221	WB	3	0	18	21	9.8	0.76
30	PCBs	Aroclor 1232	FS	4	0	18	19	9.3	0.29
30	PCBs	Aroclor 1232	WB	3	0	18	21	9.8	0.76
30	PCBs	Aroclor 1242	FS	4	0	18	19	9.3	0.29
30	PCBs	Aroclor 1242	WB	3	0	18	21	9.8	0.76
30	PCBs	Aroclor 1248	FS	4	0	18	19	9.3	0.29
30	PCBs	Aroclor 1248	WB	3	0	18	21	9.8	0.76
30	PCBs	Aroclor 1254	FS	4	1	10	19	9.4	0.48
30	PCBs	Aroclor 1254	WB	3	0	18	21	9.8	0.76
30	PCBs	Aroclor 1260	FS	4	3	11	30	16	9.6
30	PCBs	Aroclor 1260	WB	3	3	12	18	14	3.2
30	PCBs	PCB 77	FS	4	4	0.014	0.022	0.018	0.0032
30	PCBs	PCB 77	WB	3	3	0.032	0.040	0.035	0.0039
30	PCBs	PCB 105	FS	4	4	0.27	0.61	0.42	0.15
30	PCBs	PCB 105	WB	3	3	0.34	0.40	0.36	0.032
30	PCBs	PCB 114	FS	4	4	0.025	0.055	0.038	0.013
30	PCBs	PCB 114	WB	3	3	0.026	0.029	0.028	0.0017
30	PCBs	PCB 118	FS	4	4	0.63	1.2	0.89	0.23
30	PCBs	PCB 118	WB	3	3	0.71	0.84	0.76	0.070
30	PCBs	PCB 123	FS	4	4	0.012	0.026	0.018	0.0059
30	PCBs	PCB 123	WB	3	3	0.012	0.017	0.014	0.0025
30	PCBs	PCB 126	FS	4	0	0.0014	0.0024	0.00100	0.00022
30	PCBs	PCB 126	WB	3	0	0.00026	0.00066	0.00024	0.00010
30	PCBs	PCB 156	FS	4	4	0.14	0.34	0.21	0.090
30	PCBs	PCB 156	WB	3	3	0.15	0.19	0.17	0.020
30	PCBs	PCB 157	FS	4	0	0.0011	0.0021	0.00074	0.00021
30	PCBs	PCB 157	WB	3	0	0.00087	0.0043	0.0010	0.00098
30	PCBs	PCB 167	FS	4	4	0.062	0.17	0.10	0.049
30	PCBs	PCB 167	WB	3	3	0.067	0.091	0.078	0.012
30	PCBs	PCB 169	FS	4	0	0.00081	0.0011	0.00049	0.000078
30	PCBs	PCB 169	WB	3	0	0.00093	0.0025	0.00086	0.00038
30	PCBs	PCB 170	FS	4	4	0.34	0.68	0.46	0.15
30	PCBs	PCB 170	WB	3	3	0.32	0.47	0.40	0.078
30	PCBs	PCB 180	FS	4	4	1.1	2.3	1.6	0.56
30	PCBs	PCB 180	WB	3	3	0.91	1.6	1.2	0.34
30	PCBs	PCB 189	FS	4	4	0.014	0.029	0.020	0.0068
30	PCBs	PCB 189	WB	3	3	0.014	0.022	0.018	0.0039
30	Pesticides	Aldrin	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	Aldrin	WB	3	0	2.5	2.7	1.3	0.058
30	Pesticides	Alpha-BHC	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	Alpha-BHC	WB	3	0	2.5	2.7	1.3	0.058
30	Pesticides	Alpha-Chlordane	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	Alpha-Chlordane	WB	3	0	2.5	2.7	1.3	0.058
30	Pesticides	Beta-BHC	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	Beta-BHC	WB	3	0	2.5	2.7	1.3	0.058
30	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	2.5	2.7	1.3	0.058
30	Pesticides	cis-Nonachlor	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	cis-Nonachlor	WB	3	0	2.5	2.7	1.3	0.058
30	Pesticides	DDD-o,p'	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	DDD-o,p'	WB	3	0	2.5	2.7	1.3	0.058
30	Pesticides	DDE-o,p'	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	DDE-o,p'	WB	3	3	3.7	5.5	4.9	1.0
30	Pesticides	DDT-o,p'	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	DDT-o,p'	WB	3	0	2.5	2.7	1.3	0.058
30	Pesticides	DDD-p,p'	FS	4	4	2.7	9.7	5.9	3.2
30	Pesticides	DDD-p,p'	WB	3	3	5.0	12	8.5	3.5
30	Pesticides	DDE-p,p'	FS	4	4	34	100	63	29
30	Pesticides	DDE-p,p'	WB	3	3	28	51	42	13
30	Pesticides	DDT-p,p'	FS	4	3	2.2	3.8	2.7	1.2
30	Pesticides	DDT-p,p'	WB	3	3	2.0	5.4	3.6	1.7
30	Pesticides	DDMU	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	DDMU	WB	3	0	2.5	2.7	1.3	0.058
30	Pesticides	Delta-BHC	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	Delta-BHC	WB	3	0	2.5	2.7	1.3	0.058
30	Pesticides	Endosulfan Sulfate	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	Endosulfan Sulfate	WB	3	0	2.5	2.7	1.3	0.058
30	Pesticides	Gamma-Chlordane	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	Gamma-Chlordane	WB	3	0	2.5	2.7	1.3	0.058
30	Pesticides	Gamma-Chlordene	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	Gamma-Chlordene	WB	3	0	2.5	2.7	1.3	0.058

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Pesticides	Heptachlor	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	Heptachlor	WB	3	0	2.5	2.7	1.3	0.058
30	Pesticides	Heptachlor Epoxide	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	Heptachlor Epoxide	WB	3	0	2.5	2.7	1.3	0.058
30	Pesticides	Hexachlorobenzene	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	Hexachlorobenzene	WB	3	0	2.5	2.7	1.3	0.058
30	Pesticides	Lindane	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	Lindane	WB	3	0	2.5	2.7	1.3	0.058
30	Pesticides	Mirex	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	Mirex	WB	3	0	2.5	2.7	1.3	0.058
30	Pesticides	Oxychlordane	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	Oxychlordane	WB	3	0	2.5	2.7	1.3	0.058
30	Pesticides	Pentachloroanisol	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	Pentachloroanisol	WB	3	0	2.5	2.7	1.3	0.058
30	Pesticides	Toxaphene	FS	4	0	54	68	30	3.1
30	Pesticides	Toxaphene	WB	3	0	74	80	38	1.6
30	Pesticides	trans-Nonachlor	FS	4	0	2.2	2.4	1.2	0.041
30	Pesticides	trans-Nonachlor	WB	3	0	2.5	2.7	1.3	0.058
30	Semivolatiles	1,2,4-Trichlorobenzene	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	4.7	10	3.4	1.4
30	Semivolatiles	1,2-Diphenylhydrazine	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	4.7	10	3.4	1.4
30	Semivolatiles	2,4-Dinitrotoluene	FS	4	0	9.4	10	5.0	0.25
30	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	9.3	20	6.8	2.9
30	Semivolatiles	2,6-Dinitrotoluene	FS	4	0	19	21	10	0.51
30	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	19	40	14	5.7
30	Semivolatiles	2-Chloronaphthalene	FS	4	0	9.4	10	5.0	0.25
30	Semivolatiles	2-Chloronaphthalene	WB	3	0	9.3	20	6.8	2.9
30	Semivolatiles	4-Bromophenyl-Phenylether	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	4.7	10	3.4	1.4
30	Semivolatiles	4-Chlorophenyl-Phenylether	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	4.7	10	3.4	1.4
30	Semivolatiles	Acenaphthene	FS	4	0	9.4	10	5.0	0.25
30	Semivolatiles	Acenaphthene	WB	3	0	9.3	20	6.8	2.9
30	Semivolatiles	Acenaphthylene	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	Acenaphthylene	WB	3	0	4.7	10	3.4	1.4
30	Semivolatiles	Anthracene	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	Anthracene	WB	3	0	4.7	10	3.4	1.4
30	Semivolatiles	Benzene, 1,2-dichloro-	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	4.7	10	3.4	1.4
30	Semivolatiles	Benzene, 1,3-dichloro-	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	4.7	10	3.4	1.4
30	Semivolatiles	Benzene, 1,4-dichloro-	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	4.7	10	3.4	1.4
30	Semivolatiles	Benzo(a)anthracene	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	Benzo(a)anthracene	WB	3	0	4.7	10	3.4	1.4
30	Semivolatiles	Benzo(a)pyrene	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	Benzo(a)pyrene	WB	3	0	4.7	10	3.4	1.4
30	Semivolatiles	Benzo(g,h,i)perylene	FS	4	0	9.4	10	5.0	0.25
30	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	9.3	20	6.8	2.9
30	Semivolatiles	Benzo[b]fluoranthene	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	Benzo[b]fluoranthene	WB	3	0	4.7	10	3.4	1.4
30	Semivolatiles	Benzo[k]fluoranthene	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	4.7	10	3.4	1.4
30	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	4	0	9.4	10	5.0	0.25
30	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	9.3	20	6.8	2.9
30	Semivolatiles	Chrysene	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	Chrysene	WB	3	0	4.7	10	3.4	1.4
30	Semivolatiles	Dibenz[a,h]anthracene	FS	4	0	9.4	10	5.0	0.25
30	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	9.3	20	6.8	2.9
30	Semivolatiles	Dibenzofuran	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	Dibenzofuran	WB	3	0	4.7	10	3.4	1.4
30	Semivolatiles	Fluoranthene	FS	4	0	9.4	10	5.0	0.25
30	Semivolatiles	Fluoranthene	WB	3	0	9.3	20	6.8	2.9
30	Semivolatiles	9H-Fluorene	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	9H-Fluorene	WB	3	0	4.7	10	3.4	1.4
30	Semivolatiles	Hexachlorobutadiene	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	Hexachlorobutadiene	WB	3	0	4.7	10	3.4	1.4
30	Semivolatiles	Hexachloroethane	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	Hexachloroethane	WB	3	0	4.7	10	3.4	1.4
30	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	4	0	9.4	10	5.0	0.25
30	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	9.3	20	6.8	2.9
30	Semivolatiles	Naphthalene	FS	4	0	6.4	14	5.2	1.8
30	Semivolatiles	Naphthalene	WB	3	0	12	21	7.9	2.3
30	Semivolatiles	Naphthalene, 1-methyl-	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	Naphthalene, 1-methyl-	WB	3	1	5.7	10	5.5	2.9

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Semivolatiles	Naphthalene, 2-methyl-	FS	4	2	5.4	7.5	4.9	2.4
30	Semivolatiles	Naphthalene, 2-methyl-	WB	3	2	9.2	18	11	6.4
30	Semivolatiles	Nitrobenzene	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	Nitrobenzene	WB	3	0	4.7	10	3.4	1.4
30	Semivolatiles	Phenanthrene	FS	4	0	4.7	5.2	2.5	0.12
30	Semivolatiles	Phenanthrene	WB	3	1	4.8	10	4.2	1.2
30	Semivolatiles	Pyrene	FS	4	0	9.4	10	5.0	0.25
30	Semivolatiles	Pyrene	WB	3	0	9.3	20	6.8	2.9
30	Semivolatiles	Retene	FS	4	0	9.4	10	5.0	0.25
30	Semivolatiles	Retene	WB	3	0	9.3	20	6.8	2.9
48	Dioxin/furans	2,3,7,8-TCDD	FS	3	2	0.000030	0.000040	0.000032	0.000014
48	Dioxin/furans	2,3,7,8-TCDD	WB	6	4	0.000010	0.00010	0.000061	0.000043
48	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000010	0.00010	0.000040	0.000052
48	Dioxin/furans	1,2,3,7,8-PeCDD	WB	6	4	0.000010	0.00023	0.00012	0.000096
48	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000010	0.000040	0.000013	0.0000076
48	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	6	5	0.000010	0.00014	0.000074	0.000057
48	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	2	0.000030	0.000080	0.000052	0.000033
48	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	6	4	0.000010	0.00021	0.00010	0.000083
48	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000010	0.000040	0.000020	0.000018
48	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	6	4	0.000010	0.000070	0.000035	0.000027
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000010	0.00014	0.000065	0.000069
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	6	6	0.00021	0.00046	0.00034	0.000093
48	Dioxin/furans	OCDD	FS	3	2	0.000040	0.00026	0.00014	0.00012
48	Dioxin/furans	OCDD	WB	6	6	0.00050	0.00095	0.00079	0.00019
48	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00012	0.00038	0.00029	0.00015
48	Dioxin/furans	2,3,7,8-TCDF	WB	6	6	0.00029	0.00071	0.00053	0.00016
48	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	0	0.000020	0.000030	0.000012	0.0000029
48	Dioxin/furans	1,2,3,7,8-PeCDF	WB	6	5	0.000010	0.000060	0.000038	0.000019
48	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	1	0.000020	0.00010	0.000042	0.000051
48	Dioxin/furans	2,3,4,7,8-PeCDF	WB	6	6	0.000070	0.00019	0.00013	0.000041
48	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	1	0.000010	0.000040	0.000013	0.0000058
48	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	6	5	0.000010	0.000030	0.000021	0.000011
48	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	0	0.000010	0.000040	0.000012	0.0000076
48	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	6	3	0.000010	0.000040	0.000018	0.000015
48	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000040	0.000012	0.0000076
48	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	6	3	0.000010	0.000060	0.000029	0.000027
48	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000010	0.000040	0.000012	0.0000076
48	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	6	3	0.000010	0.00014	0.000073	0.000074
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000020	0.000050	0.000017	0.0000076
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	6	4	0.000010	0.00012	0.000073	0.000048
48	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000020	0.000050	0.000017	0.0000076
48	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	6	0	0.000010	0.000050	0.000010	0.0000084
48	Dioxin/furans	OCDF	FS	3	0	0.000020	0.00010	0.000027	0.000021
48	Dioxin/furans	OCDF	WB	6	5	0.000010	0.00011	0.000071	0.000037
48	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	770	930	420	41
48	Guaiacols/Phenols	4-Chloroguaiacol	WB	6	0	480	940	350	100
48	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	770	930	420	41
48	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	6	0	480	940	350	100
48	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	770	930	420	41
48	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	6	0	480	940	350	100
48	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	770	930	420	41
48	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	6	0	480	940	350	100
48	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	770	930	420	41
48	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	6	0	480	940	350	100
48	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	310	370	170	16
48	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	6	0	190	380	140	42
48	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	770	930	420	41
48	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	6	0	480	940	350	100
48	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	310	370	170	16
48	Guaiacols/Phenols	Tetrachloroguaiacol	WB	6	0	190	380	140	42
48	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	310	370	170	16
48	Guaiacols/Phenols	2-Chlorophenol	WB	6	0	190	380	140	42
48	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	310	370	170	16
48	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	6	0	190	380	140	42
48	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	310	370	170	16
48	Guaiacols/Phenols	2,4-Dichlorophenol	WB	6	0	190	380	140	42
48	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	770	930	420	41
48	Guaiacols/Phenols	2,4-Dimethylphenol	WB	6	0	480	940	350	100
48	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	310	370	170	16
48	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	320	380	180	17
48	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	310	370	170	16
48	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	6	0	190	380	140	42
48	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	310	370	170	16
48	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	320	380	180	17
48	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	310	370	170	16
48	Guaiacols/Phenols	Pentachlorophenol	WB	6	0	190	380	140	42

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Guaiacols/Phenols	Phenol	FS	3	0	310	370	170	16
48	Guaiacols/Phenols	Phenol	WB	6	0	190	380	140	42
48	Metals	Aluminum	FS	3	2	580	2,900	1,300	1,300
48	Metals	Aluminum	WB	6	6	42,000	61,000	49,000	7,200
48	Metals	Antimony	FS	3	0	50	50	25	0.00
48	Metals	Antimony	WB	6	0	50	50	25	0.00
48	Metals	Arsenic	FS	3	3	52	61	56	4.5
48	Metals	Arsenic	WB	6	6	74	150	100	27
48	Metals	Barium	FS	3	3	590	760	690	87
48	Metals	Barium	WB	6	6	1,800	2,100	1,900	120
48	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
48	Metals	Beryllium	WB	6	1	4.0	6.9	2.8	2.0
48	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
48	Metals	Cadmium	WB	6	6	17	39	24	8.1
48	Metals	Chromium	FS	3	2	100	150	110	51
48	Metals	Chromium	WB	6	6	190	280	240	41
48	Metals	Cobalt	FS	3	3	27	120	81	48
48	Metals	Cobalt	WB	6	6	79	180	130	46
48	Metals	Copper	FS	3	3	500	670	590	86
48	Metals	Copper	WB	6	6	940	1,300	1,100	140
48	Metals	Lead	FS	3	3	14	17	16	1.5
48	Metals	Lead	WB	6	6	51	75	63	9.3
48	Metals	Manganese	FS	3	3	3,200	3,600	3,400	170
48	Metals	Manganese	WB	6	6	15,000	19,000	17,000	2,100
48	Metals	Mercury	FS	3	3	260	350	290	56
48	Metals	Mercury	WB	6	6	59	250	150	69
48	Metals	Nickel	FS	3	3	49	58	53	4.6
48	Metals	Nickel	WB	6	6	280	470	390	88
48	Metals	Selenium	FS	3	3	270	310	290	21
48	Metals	Selenium	WB	6	6	290	490	340	77
48	Metals	Silver	FS	3	0	100	100	50	0.00
48	Metals	Silver	WB	6	0	100	100	50	0.00
48	Metals	Thallium	FS	3	0	50	50	25	0.00
48	Metals	Thallium	WB	6	0	50	50	25	0.00
48	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
48	Metals	Vanadium	WB	6	6	210	370	270	64
48	Metals	Zinc	FS	3	3	20,000	21,000	20,000	500
48	Metals	Zinc	WB	6	6	21,000	25,000	22,000	1,600
48	PCBs	Aroclor 1016	FS	3	0	20	20	10	0.00
48	PCBs	Aroclor 1016	WB	6	0	17	22	9.7	0.88
48	PCBs	Aroclor 1221	FS	3	0	20	20	10	0.00
48	PCBs	Aroclor 1221	WB	6	0	17	22	9.7	0.88
48	PCBs	Aroclor 1232	FS	3	0	20	20	10	0.00
48	PCBs	Aroclor 1232	WB	6	0	17	22	9.7	0.88
48	PCBs	Aroclor 1242	FS	3	0	20	20	10	0.00
48	PCBs	Aroclor 1242	WB	6	0	17	22	9.7	0.88
48	PCBs	Aroclor 1248	FS	3	0	20	20	10	0.00
48	PCBs	Aroclor 1248	WB	6	0	17	22	9.7	0.88
48	PCBs	Aroclor 1254	FS	3	3	16	20	19	2.3
48	PCBs	Aroclor 1254	WB	6	6	23	46	36	8.6
48	PCBs	Aroclor 1260	FS	3	3	43	75	56	17
48	PCBs	Aroclor 1260	WB	6	6	44	100	77	20
48	PCBs	PCB 77	FS	3	3	0.019	0.032	0.025	0.0069
48	PCBs	PCB 77	WB	6	6	0.029	0.044	0.035	0.0066
48	PCBs	PCB 105	FS	3	3	0.54	0.71	0.63	0.088
48	PCBs	PCB 105	WB	6	6	0.51	1.1	0.84	0.20
48	PCBs	PCB 114	FS	3	3	0.040	0.054	0.047	0.0073
48	PCBs	PCB 114	WB	6	6	0.053	0.081	0.066	0.011
48	PCBs	PCB 118	FS	3	3	1.3	2.1	1.6	0.38
48	PCBs	PCB 118	WB	6	6	0.85	2.8	1.8	0.86
48	PCBs	PCB 123	FS	3	3	0.021	0.024	0.023	0.0020
48	PCBs	PCB 123	WB	6	6	0.028	0.042	0.036	0.0062
48	PCBs	PCB 126	FS	3	0	0.0012	0.0019	0.00073	0.00020
48	PCBs	PCB 126	WB	6	0	0.0012	0.0061	0.0014	0.00094
48	PCBs	PCB 156	FS	3	3	0.41	0.61	0.49	0.10
48	PCBs	PCB 156	WB	6	6	0.43	0.75	0.63	0.11
48	PCBs	PCB 157	FS	3	3	0.058	0.082	0.073	0.014
48	PCBs	PCB 157	WB	6	3	0.0037	0.12	0.056	0.059
48	PCBs	PCB 167	FS	3	3	0.20	0.33	0.26	0.066
48	PCBs	PCB 167	WB	6	6	0.20	0.38	0.31	0.059
48	PCBs	PCB 169	FS	3	0	0.0026	0.0035	0.0016	0.00024
48	PCBs	PCB 169	WB	6	0	0.00080	0.021	0.0029	0.0037
48	PCBs	PCB 170	FS	3	3	1.4	2.3	1.8	0.46
48	PCBs	PCB 170	WB	6	6	0.98	2.5	1.7	0.56
48	PCBs	PCB 180	FS	3	3	4.8	8.6	6.5	2.0
48	PCBs	PCB 180	WB	6	6	2.7	8.0	5.4	2.1

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	PCBs	PCB 189	FS	3	3	0.063	0.11	0.083	0.025
48	PCBs	PCB 189	WB	6	6	0.045	0.11	0.083	0.021
48	Pesticides	Aldrin	FS	3	0	2.0	2.0	1.0	0.00
48	Pesticides	Aldrin	WB	6	0	1.7	2.7	1.1	0.22
48	Pesticides	Alpha-BHC	FS	3	0	2.0	2.0	1.0	0.00
48	Pesticides	Alpha-BHC	WB	6	0	1.7	2.7	1.1	0.22
48	Pesticides	Alpha-Chlordene	FS	3	0	2.0	2.0	1.0	0.00
48	Pesticides	Alpha-Chlordene	WB	6	0	1.7	2.7	1.1	0.22
48	Pesticides	Beta-BHC	FS	3	0	2.0	2.0	1.0	0.00
48	Pesticides	Beta-BHC	WB	6	0	1.7	2.7	1.1	0.22
48	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	2	1.2	2.0	1.2	0.15
48	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	6	0	1.7	2.7	1.1	0.22
48	Pesticides	cis-Nonachlor	FS	3	0	2.0	2.0	1.0	0.00
48	Pesticides	cis-Nonachlor	WB	6	2	1.9	17	5.3	6.7
48	Pesticides	DDD-o,p'	FS	3	3	4.3	6.2	5.5	1.0
48	Pesticides	DDD-o,p'	WB	6	6	3.7	16	9.3	4.7
48	Pesticides	DDE-o,p'	FS	3	3	2.3	4.4	3.3	1.1
48	Pesticides	DDE-o,p'	WB	6	6	4.3	9.3	6.0	1.7
48	Pesticides	DDT-o,p'	FS	3	3	5.9	12	8.7	3.1
48	Pesticides	DDT-o,p'	WB	6	1	1.7	17	3.8	6.5
48	Pesticides	DDD-p,p'	FS	3	3	20	22	21	1.2
48	Pesticides	DDD-p,p'	WB	6	6	49	140	82	35
48	Pesticides	DDE-p,p'	FS	3	3	430	680	530	130
48	Pesticides	DDE-p,p'	WB	6	6	390	1,300	890	320
48	Pesticides	DDT-p,p'	FS	3	3	50	92	64	24
48	Pesticides	DDT-p,p'	WB	6	6	31	180	83	55
48	Pesticides	DDMU	FS	3	3	11	19	14	4.4
48	Pesticides	DDMU	WB	6	6	12	40	22	10
48	Pesticides	Delta-BHC	FS	3	0	2.0	2.0	1.0	0.00
48	Pesticides	Delta-BHC	WB	6	0	1.7	2.7	1.1	0.22
48	Pesticides	Endosulfan Sulfate	FS	3	3	1.6	2.4	1.9	0.42
48	Pesticides	Endosulfan Sulfate	WB	6	2	1.7	6.5	2.1	2.2
48	Pesticides	Gamma-Chlordane	FS	3	0	2.0	2.0	1.0	0.00
48	Pesticides	Gamma-Chlordane	WB	6	0	1.7	2.7	1.1	0.22
48	Pesticides	Gamma-Chlordene	FS	3	0	2.0	2.0	1.0	0.00
48	Pesticides	Gamma-Chlordene	WB	6	0	1.7	2.7	1.1	0.22
48	Pesticides	Heptachlor	FS	3	0	2.0	2.0	1.0	0.00
48	Pesticides	Heptachlor	WB	6	0	1.7	2.7	1.1	0.22
48	Pesticides	Heptachlor Epoxide	FS	3	0	2.0	2.0	1.0	0.00
48	Pesticides	Heptachlor Epoxide	WB	6	0	1.7	2.7	1.1	0.22
48	Pesticides	Hexachlorobenzene	FS	3	0	2.0	2.0	1.0	0.00
48	Pesticides	Hexachlorobenzene	WB	6	1	1.2	2.7	1.1	0.21
48	Pesticides	Lindane	FS	3	0	2.0	2.0	1.0	0.00
48	Pesticides	Lindane	WB	6	0	1.7	2.7	1.1	0.22
48	Pesticides	Mirex	FS	3	1	1.3	2.0	1.1	0.17
48	Pesticides	Mirex	WB	6	1	1.7	2.7	1.3	0.38
48	Pesticides	Oxychlordane	FS	3	0	2.0	2.0	1.0	0.00
48	Pesticides	Oxychlordane	WB	6	1	0.97	2.7	1.1	0.21
48	Pesticides	Pentachloroanisol	FS	3	1	0.98	2.0	0.99	0.012
48	Pesticides	Pentachloroanisol	WB	6	2	0.88	2.7	1.2	0.21
48	Pesticides	Toxaphene	FS	3	0	59	60	30	0.29
48	Pesticides	Toxaphene	WB	6	0	52	81	33	6.5
48	Pesticides	trans-Nonachlor	FS	3	3	2.2	4.2	3.1	1.0
48	Pesticides	trans-Nonachlor	WB	6	3	2.5	8.3	3.8	3.2
48	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	1,2,4-Trichlorobenzene	WB	6	0	4.8	9.4	3.5	1.0
48	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	1,2-Diphenylhydrazine	WB	6	0	4.8	9.4	3.5	1.0
48	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	15	19	8.4	0.85
48	Semivolatiles	2,4-Dinitrotoluene	WB	6	0	9.6	19	7.1	2.1
48	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	31	37	17	1.6
48	Semivolatiles	2,6-Dinitrotoluene	WB	6	0	19	38	14	4.2
48	Semivolatiles	2-Chloronaphthalene	FS	3	0	15	19	8.4	0.85
48	Semivolatiles	2-Chloronaphthalene	WB	6	0	9.6	19	7.1	2.1
48	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	4-Bromophenyl-Phenylether	WB	6	0	4.8	9.4	3.5	1.0
48	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	4-Chlorophenyl-Phenylether	WB	6	0	4.8	9.4	3.5	1.0
48	Semivolatiles	Acenaphthene	FS	3	0	15	19	8.4	0.85
48	Semivolatiles	Acenaphthene	WB	6	0	9.6	19	7.1	2.1
48	Semivolatiles	Acenaphthylene	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	Acenaphthylene	WB	6	0	4.8	9.4	3.5	1.0
48	Semivolatiles	Anthracene	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	Anthracene	WB	6	0	4.8	9.4	3.5	1.0
48	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	Benzene, 1,2-dichloro-	WB	6	0	4.8	9.4	3.5	1.0

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	Benzene, 1,3-dichloro-	WB	6	0	4.8	9.4	3.5	1.0
48	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	Benzene, 1,4-dichloro-	WB	6	0	4.8	9.4	3.5	1.0
48	Semivolatiles	Benzo(a)anthracene	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	Benzo(a)anthracene	WB	6	0	4.8	9.4	3.5	1.0
48	Semivolatiles	Benzo(a)pyrene	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	Benzo(a)pyrene	WB	6	0	4.8	9.4	3.5	1.0
48	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	15	19	8.4	0.85
48	Semivolatiles	Benzo(g,h,i)perylene	WB	6	0	9.6	19	7.1	2.1
48	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	Benzo[b]Fluoranthene	WB	6	0	4.8	9.4	3.5	1.0
48	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	Benzo[k]fluoranthene	WB	6	0	4.8	9.4	3.5	1.0
48	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	15	19	8.4	0.85
48	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	6	0	9.6	19	7.1	2.1
48	Semivolatiles	Chrysene	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	Chrysene	WB	6	0	4.8	9.4	3.5	1.0
48	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	15	19	8.4	0.85
48	Semivolatiles	Dibenz[a,h]anthracene	WB	6	0	9.6	19	7.1	2.1
48	Semivolatiles	Dibenzofuran	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	Dibenzofuran	WB	6	0	4.8	9.4	3.5	1.0
48	Semivolatiles	Fluoranthene	FS	3	0	15	19	8.4	0.85
48	Semivolatiles	Fluoranthene	WB	6	0	9.6	19	7.1	2.1
48	Semivolatiles	9H-Fluorene	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	9H-Fluorene	WB	6	0	4.8	9.4	3.5	1.0
48	Semivolatiles	Hexachlorobutadiene	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	Hexachlorobutadiene	WB	6	0	4.8	9.4	3.5	1.0
48	Semivolatiles	Hexachloroethane	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	Hexachloroethane	WB	6	0	4.8	9.4	3.5	1.0
48	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	15	19	8.4	0.85
48	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	6	0	9.6	19	7.1	2.1
48	Semivolatiles	Naphthalene	FS	3	0	13	15	6.9	0.42
48	Semivolatiles	Naphthalene	WB	6	0	6.2	13	5.3	1.2
48	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	Naphthalene, 1-methyl-	WB	6	1	4.9	9.4	4.0	0.99
48	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	Naphthalene, 2-methyl-	WB	6	3	7.9	10	7.3	3.1
48	Semivolatiles	Nitrobenzene	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	Nitrobenzene	WB	6	0	4.8	9.4	3.5	1.0
48	Semivolatiles	Phenanthrene	FS	3	0	7.7	9.3	4.2	0.41
48	Semivolatiles	Phenanthrene	WB	6	0	4.8	9.4	3.5	1.0
48	Semivolatiles	Pyrene	FS	3	0	15	19	8.4	0.85
48	Semivolatiles	Pyrene	WB	6	0	9.6	19	7.1	2.1
48	Semivolatiles	Retene	FS	3	0	15	19	8.4	0.85
48	Semivolatiles	Retene	WB	6	0	9.6	19	7.1	2.1
49	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000010	0.000040	0.000018	0.000019
49	Dioxin/furans	2,3,7,8-TCDD	WB	3	3	0.000050	0.000090	0.000070	0.000020
49	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000010	0.00018	0.00010	0.000089
49	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.00014	0.00018	0.00016	0.000020
49	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	1	0.000010	0.000090	0.000035	0.000048
49	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	3	0.00011	0.00012	0.00011	0.0000058
49	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.000050	0.00014	0.000087	0.000047
49	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000010	0.00010	0.000058	0.000049
49	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000020	0.000050	0.000027	0.000021
49	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000010	0.000030	0.000022	0.000014
49	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	1	0.000010	0.00015	0.000053	0.000084
49	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00018	0.00024	0.00020	0.000035
49	Dioxin/furans	OCDD	FS	3	3	0.00020	0.00054	0.00032	0.00019
49	Dioxin/furans	OCDD	WB	3	3	0.00031	0.00047	0.00041	0.000090
49	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.000090	0.00011	0.00010	0.000010
49	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00018	0.00039	0.00028	0.00011
49	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.000030	0.000080	0.000050	0.000026
49	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.000030	0.000050	0.000040	0.000010
49	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	2	0.000020	0.000030	0.000020	0.000010
49	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.000030	0.000060	0.000047	0.000015
49	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	2	0.000010	0.000080	0.000035	0.000040
49	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	2	0.000010	0.000020	0.000012	0.0000076
49	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000020	0.00010	0.000050	0.000044
49	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	3	0.000020	0.000030	0.000027	0.0000058
49	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	2	0.000010	0.00020	0.000088	0.000010
49	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	3	0.000060	0.000060	0.000060	0.00
49	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	3	0.00013	0.00023	0.00017	0.000053
49	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00015	0.00015	0.00015	0.00
49	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000020	0.00019	0.00010	0.000090
49	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	3	0.000070	0.000080	0.000077	0.0000058

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Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
49	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	1	0.000010	0.00019	0.000068	0.00011
49	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
49	Dioxin/furans	OCDF	FS	3	2	0.000010	0.00030	0.00012	0.00016
49	Dioxin/furans	OCDF	WB	3	2	0.000010	0.000060	0.000035	0.000028
49	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	480	530	250	11
49	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	470	530	250	16
49	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	480	530	250	11
49	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	470	530	250	16
49	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	480	530	250	11
49	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	470	530	250	16
49	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	480	530	250	11
49	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	470	530	250	16
49	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	480	530	250	11
49	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	470	530	250	16
49	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	190	210	100	4.5
49	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	190	210	100	6.4
49	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	480	530	250	11
49	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	470	530	250	16
49	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	190	210	100	4.5
49	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	190	210	100	6.4
49	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	190	210	100	4.5
49	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	190	210	100	6.4
49	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	190	210	100	4.5
49	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	190	210	100	6.4
49	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	190	210	100	4.5
49	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	190	210	100	6.4
49	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	480	530	250	11
49	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	470	530	250	16
49	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	190	210	100	4.5
49	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	190	210	100	6.4
49	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	190	210	100	4.5
49	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	190	210	100	6.4
49	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	190	210	100	4.5
49	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	190	210	100	6.4
49	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	190	210	100	4.5
49	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	190	210	100	6.4
49	Guaiacols/Phenols	Phenol	FS	3	0	190	210	100	4.5
49	Guaiacols/Phenols	Phenol	WB	3	0	190	210	100	6.4
49	Metals	Aluminum	FS	3	1	1,400	20,000	4,600	4,700
49	Metals	Aluminum	WB	3	3	28,000	51,000	41,000	12,000
49	Metals	Antimony	FS	3	0	50	50	25	0.00
49	Metals	Antimony	WB	3	0	50	50	25	0.00
49	Metals	Arsenic	FS	3	1	50	63	38	22
49	Metals	Arsenic	WB	3	3	100	100	100	0.00
49	Metals	Barium	FS	3	3	290	780	500	250
49	Metals	Barium	WB	3	3	1,100	1,600	1,400	250
49	Metals	Beryllium	FS	3	1	4.0	6.0	3.3	2.3
49	Metals	Beryllium	WB	3	3	5.7	7.0	6.2	0.70
49	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
49	Metals	Cadmium	WB	3	3	18	29	23	5.6
49	Metals	Chromium	FS	3	0	100	100	50	0.00
49	Metals	Chromium	WB	3	3	160	220	190	30
49	Metals	Cobalt	FS	3	3	21	29	26	4.2
49	Metals	Cobalt	WB	3	3	89	110	97	8.6
49	Metals	Copper	FS	3	3	580	610	590	17
49	Metals	Copper	WB	3	3	1,300	1,500	1,400	120
49	Metals	Lead	FS	3	3	10	26	16	8.7
49	Metals	Lead	WB	3	3	27	32	30	2.5
49	Metals	Manganese	FS	3	3	1,900	2,700	2,200	380
49	Metals	Manganese	WB	3	3	11,000	13,000	12,000	1,100
49	Metals	Mercury	FS	3	3	160	310	220	81
49	Metals	Mercury	WB	3	3	77	130	97	25
49	Metals	Nickel	FS	3	3	61	98	77	19
49	Metals	Nickel	WB	3	3	510	550	530	17
49	Metals	Selenium	FS	3	3	130	190	150	32
49	Metals	Selenium	WB	3	3	180	250	220	35
49	Metals	Silver	FS	3	0	100	100	50	0.00
49	Metals	Silver	WB	3	0	100	100	50	0.00
49	Metals	Thallium	FS	3	0	50	50	25	0.00
49	Metals	Thallium	WB	3	0	50	50	25	0.00
49	Metals	Vanadium	FS	3	1	10	20	10	5.5
49	Metals	Vanadium	WB	3	3	160	250	210	46
49	Metals	Zinc	FS	3	3	18,000	19,000	18,000	560
49	Metals	Zinc	WB	3	3	21,000	23,000	22,000	870
49	PCBs	Aroclor 1016	FS	3	0	18	21	9.8	0.76
49	PCBs	Aroclor 1016	WB	3	0	19	20	9.8	0.29

Appendix D-1: Site Summary Statistics
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Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
49	PCBs	Aroclor 1221	FS	3	0	18	21	9.8	0.76
49	PCBs	Aroclor 1221	WB	3	0	19	20	9.8	0.29
49	PCBs	Aroclor 1232	FS	3	0	18	21	9.8	0.76
49	PCBs	Aroclor 1232	WB	3	0	19	20	9.8	0.29
49	PCBs	Aroclor 1242	FS	3	0	18	21	9.8	0.76
49	PCBs	Aroclor 1242	WB	3	0	19	20	9.8	0.29
49	PCBs	Aroclor 1248	FS	3	0	18	21	9.8	0.76
49	PCBs	Aroclor 1248	WB	3	0	19	20	9.8	0.29
49	PCBs	Aroclor 1254	FS	3	2	13	46	23	20
49	PCBs	Aroclor 1254	WB	3	3	25	32	28	3.5
49	PCBs	Aroclor 1260	FS	3	1	18	58	26	28
49	PCBs	Aroclor 1260	WB	3	2	16	20	14	3.8
49	PCBs	PCB 77	FS	3	3	0.0074	0.0090	0.0082	0.00082
49	PCBs	PCB 77	WB	3	3	0.017	0.036	0.026	0.0097
49	PCBs	PCB 105	FS	3	3	0.23	0.44	0.33	0.10
49	PCBs	PCB 105	WB	3	3	0.91	1.3	1.1	0.20
49	PCBs	PCB 114	FS	3	3	0.018	0.035	0.026	0.0084
49	PCBs	PCB 114	WB	3	3	0.078	0.11	0.093	0.014
49	PCBs	PCB 118	FS	3	3	0.53	1.0	0.79	0.25
49	PCBs	PCB 118	WB	3	3	1.8	2.7	2.3	0.45
49	PCBs	PCB 123	FS	3	3	0.0098	0.017	0.013	0.0035
49	PCBs	PCB 123	WB	3	3	0.036	0.046	0.041	0.0048
49	PCBs	PCB 126	FS	3	2	0.0011	0.0019	0.0012	0.00067
49	PCBs	PCB 126	WB	3	3	0.0034	0.0060	0.0044	0.0014
49	PCBs	PCB 156	FS	3	3	0.097	0.21	0.16	0.055
49	PCBs	PCB 156	WB	3	3	0.43	0.56	0.51	0.069
49	PCBs	PCB 157	FS	3	3	0.0011	0.040	0.020	0.020
49	PCBs	PCB 157	WB	3	3	0.084	0.11	0.10	0.016
49	PCBs	PCB 167	FS	3	3	0.043	0.087	0.069	0.023
49	PCBs	PCB 167	WB	3	3	0.20	0.25	0.22	0.024
49	PCBs	PCB 169	FS	3	0	0.00053	0.00093	0.00033	0.00011
49	PCBs	PCB 169	WB	3	0	0.00092	0.0024	0.00091	0.00039
49	PCBs	PCB 170	FS	3	3	0.13	0.27	0.20	0.072
49	PCBs	PCB 170	WB	3	3	0.49	0.62	0.54	0.066
49	PCBs	PCB 180	FS	3	3	0.37	0.81	0.61	0.22
49	PCBs	PCB 180	WB	3	3	1.4	1.9	1.6	0.27
49	PCBs	PCB 189	FS	3	3	0.0049	0.011	0.0090	0.0035
49	PCBs	PCB 189	WB	3	3	0.022	0.028	0.024	0.0033
49	Pesticides	Aldrin	FS	3	0	2.2	2.6	1.2	0.10
49	Pesticides	Aldrin	WB	3	0	2.4	5.0	1.6	0.75
49	Pesticides	Alpha-BHC	FS	3	0	2.2	2.6	1.2	0.10
49	Pesticides	Alpha-BHC	WB	3	0	2.4	5.0	1.6	0.75
49	Pesticides	Alpha-Chlordane	FS	3	0	2.2	2.6	1.2	0.10
49	Pesticides	Alpha-Chlordane	WB	3	0	2.4	5.0	1.6	0.75
49	Pesticides	Beta-BHC	FS	3	0	2.2	2.6	1.2	0.10
49	Pesticides	Beta-BHC	WB	3	0	2.4	5.0	1.6	0.75
49	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	2.2	2.6	1.2	0.10
49	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	2.4	5.0	1.6	0.75
49	Pesticides	cis-Nonachlor	FS	3	0	2.2	2.6	1.2	0.10
49	Pesticides	cis-Nonachlor	WB	3	0	2.4	5.0	1.6	0.75
49	Pesticides	DDD-o,p'	FS	3	1	2.2	12	4.8	6.2
49	Pesticides	DDD-o,p'	WB	3	2	2.2	5.0	2.8	0.74
49	Pesticides	DDE-o,p'	FS	3	1	2.2	4.4	2.3	1.9
49	Pesticides	DDE-o,p'	WB	3	2	3.2	5.1	3.6	1.3
49	Pesticides	DDT-o,p'	FS	3	0	2.2	2.6	1.2	0.10
49	Pesticides	DDT-o,p'	WB	3	0	2.4	5.0	1.6	0.75
49	Pesticides	DDD-p,p'	FS	3	3	2.1	91	32	51
49	Pesticides	DDD-p,p'	WB	3	3	11	23	17	6.0
49	Pesticides	DDE-p,p'	FS	3	3	36	740	280	400
49	Pesticides	DDE-p,p'	WB	3	3	130	240	190	55
49	Pesticides	DDT-p,p'	FS	3	3	10	78	33	39
49	Pesticides	DDT-p,p'	WB	3	3	29	56	46	15
49	Pesticides	DDMU	FS	3	0	2.2	2.6	1.2	0.10
49	Pesticides	DDMU	WB	3	0	2.4	5.0	1.6	0.75
49	Pesticides	Delta-BHC	FS	3	0	2.2	2.6	1.2	0.10
49	Pesticides	Delta-BHC	WB	3	0	2.4	5.0	1.6	0.75
49	Pesticides	Endosulfan Sulfate	FS	3	0	2.2	2.6	1.2	0.10
49	Pesticides	Endosulfan Sulfate	WB	3	0	2.4	5.0	1.6	0.75
49	Pesticides	Gamma-Chlordane	FS	3	0	2.2	2.6	1.2	0.10
49	Pesticides	Gamma-Chlordane	WB	3	0	2.4	5.0	1.6	0.75
49	Pesticides	Gamma-Chlordene	FS	3	0	2.2	2.6	1.2	0.10
49	Pesticides	Gamma-Chlordene	WB	3	0	2.4	5.0	1.6	0.75
49	Pesticides	Heptachlor	FS	3	0	2.2	2.6	1.2	0.10
49	Pesticides	Heptachlor	WB	3	0	2.4	5.0	1.6	0.75
49	Pesticides	Heptachlor Epoxide	FS	3	0	2.2	2.6	1.2	0.10
49	Pesticides	Heptachlor Epoxide	WB	3	0	2.4	5.0	1.6	0.75

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
49	Pesticides	Hexachlorobenzene	FS	3	0	2.2	2.6	1.2	0.10
49	Pesticides	Hexachlorobenzene	WB	3	0	2.4	5.0	1.6	0.75
49	Pesticides	Lindane	FS	3	0	2.2	2.6	1.2	0.10
49	Pesticides	Lindane	WB	3	0	2.4	5.0	1.6	0.75
49	Pesticides	Mirex	FS	3	0	2.2	2.6	1.2	0.10
49	Pesticides	Mirex	WB	3	0	2.4	5.0	1.6	0.75
49	Pesticides	Oxychlordane	FS	3	0	2.2	2.6	1.2	0.10
49	Pesticides	Oxychlordane	WB	3	0	2.4	5.0	1.6	0.75
49	Pesticides	Pentachloroanisol	FS	3	1	1.0	2.6	1.1	0.15
49	Pesticides	Pentachloroanisol	WB	3	2	1.0	5.0	1.6	0.81
49	Pesticides	Toxaphene	FS	3	0	54	63	30	2.3
49	Pesticides	Toxaphene	WB	3	0	57	60	30	0.87
49	Pesticides	trans-Nonachlor	FS	3	0	2.2	2.6	1.2	0.10
49	Pesticides	trans-Nonachlor	WB	3	0	2.4	5.0	1.6	0.75
49	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	24	26	13	0.80
49	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	1,2-Diphenylhydrazine	WB	3	1	24	120	49	63
49	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	9.6	11	5.0	0.23
49	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	47	53	25	1.6
49	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	19	21	10	0.45
49	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	94	110	51	3.0
49	Semivolatiles	2-Chloronaphthalene	FS	3	0	9.6	11	5.0	0.23
49	Semivolatiles	2-Chloronaphthalene	WB	3	0	47	53	25	1.6
49	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	24	26	13	0.80
49	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	24	26	13	0.80
49	Semivolatiles	Acenaphthene	FS	3	0	9.6	11	5.0	0.23
49	Semivolatiles	Acenaphthene	WB	3	0	47	53	25	1.6
49	Semivolatiles	Acenaphthylene	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	Acenaphthylene	WB	3	0	24	26	13	0.80
49	Semivolatiles	Anthracene	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	Anthracene	WB	3	0	24	26	13	0.80
49	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	24	26	13	0.80
49	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	24	26	13	0.80
49	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	24	26	13	0.80
49	Semivolatiles	Benzo(a)anthracene	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	Benzo(a)anthracene	WB	3	0	24	26	13	0.80
49	Semivolatiles	Benzo(a)pyrene	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	Benzo(a)pyrene	WB	3	0	24	26	13	0.80
49	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	9.6	11	5.0	0.23
49	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	47	53	25	1.6
49	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	24	26	13	0.80
49	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	24	26	13	0.80
49	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	9.6	11	5.0	0.23
49	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	47	53	25	1.6
49	Semivolatiles	Chrysene	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	Chrysene	WB	3	0	24	26	13	0.80
49	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	9.6	11	5.0	0.23
49	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	47	53	25	1.6
49	Semivolatiles	Dibenzofuran	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	Dibenzofuran	WB	3	0	24	26	13	0.80
49	Semivolatiles	Fluoranthene	FS	3	0	9.6	11	5.0	0.23
49	Semivolatiles	Fluoranthene	WB	3	0	47	53	25	1.6
49	Semivolatiles	9H-Fluorene	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	9H-Fluorene	WB	3	0	24	26	13	0.80
49	Semivolatiles	Hexachlorobutadiene	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	Hexachlorobutadiene	WB	3	0	24	26	13	0.80
49	Semivolatiles	Hexachloroethane	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	Hexachloroethane	WB	3	0	24	26	13	0.80
49	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	9.6	11	5.0	0.23
49	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	47	53	25	1.6
49	Semivolatiles	Naphthalene	FS	3	0	5.4	10	3.8	1.2
49	Semivolatiles	Naphthalene	WB	3	1	24	67	31	31
49	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	24	26	13	0.80
49	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	24	26	13	0.80
49	Semivolatiles	Nitrobenzene	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	Nitrobenzene	WB	3	0	24	26	13	0.80

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
49	Semivolatiles	Phenanthrene	FS	3	0	4.8	5.2	2.5	0.10
49	Semivolatiles	Phenanthrene	WB	3	0	24	26	13	0.80
49	Semivolatiles	Pyrene	FS	3	0	9.6	11	5.0	0.23
49	Semivolatiles	Pyrene	WB	3	0	47	53	25	1.6
49	Semivolatiles	Retene	FS	3	0	9.6	11	5.0	0.23
49	Semivolatiles	Retene	WB	3	0	47	53	25	1.6
98	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000010	0.000060	0.000022	0.000010
98	Dioxin/furans	2,3,7,8-TCDD	WB	3	1	0.000020	0.000050	0.000023	0.000023
98	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000030	0.00015	0.000062	0.000077
98	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.00014	0.00017	0.00016	0.000015
98	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	1	0.000080	0.00012	0.000072	0.000043
98	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	3	0.00011	0.00013	0.00012	0.000010
98	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	1	0.000080	0.00011	0.000062	0.000026
98	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000030	0.00014	0.000085	0.000064
98	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000070	0.00011	0.000055	0.000015
98	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000030	0.000050	0.000038	0.000020
98	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.00011	0.00015	0.00012	0.000052
98	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	2	0.000020	0.00024	0.00015	0.00013
98	Dioxin/furans	OCDD	FS	3	1	0.000010	0.00019	0.000060	0.000044
98	Dioxin/furans	OCDD	WB	3	1	0.000040	0.00035	0.00013	0.00019
98	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00016	0.00034	0.00023	0.000099
98	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00042	0.00052	0.00047	0.000050
98	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	1	0.000030	0.000060	0.000032	0.000025
98	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	2	0.000020	0.000050	0.000037	0.000023
98	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	0	0.000010	0.000040	0.000013	0.0000076
98	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.000050	0.000070	0.000060	0.000010
98	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	1	0.000040	0.000080	0.000037	0.0000058
98	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	3	0.000020	0.000030	0.000023	0.0000058
98	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	1	0.000040	0.00010	0.000043	0.0000058
98	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	1	0.000010	0.000030	0.000015	0.000013
98	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	2	0.000080	0.00012	0.000087	0.000042
98	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
98	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	2	0.000080	0.00015	0.00011	0.000061
98	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00015	0.00017	0.00016	0.000012
98	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000070	0.00013	0.000068	0.0000029
98	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	3	0.000090	0.00011	0.000097	0.000012
98	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	1	0.000040	0.00013	0.000047	0.000016
98	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	1	0.000030	0.000040	0.000022	0.0000076
98	Dioxin/furans	OCDF	FS	3	1	0.000080	0.00012	0.000060	0.000020
98	Dioxin/furans	OCDF	WB	3	2	0.000040	0.000090	0.000060	0.000036
98	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	440	470	230	8.5
98	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	480	500	240	5.4
98	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	440	470	230	8.5
98	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	480	500	240	5.4
98	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	440	470	230	8.5
98	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	480	500	240	5.4
98	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	440	470	230	8.5
98	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	480	500	240	5.4
98	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	440	470	230	8.5
98	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	480	500	240	5.4
98	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	180	190	91	3.4
98	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	190	200	97	2.2
98	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	440	470	230	8.5
98	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	480	500	240	5.4
98	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	180	190	91	3.4
98	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	190	200	97	2.2
98	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	180	190	91	3.4
98	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	190	200	97	2.2
98	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	180	190	91	3.4
98	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	190	200	97	2.2
98	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	180	190	91	3.4
98	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	190	200	97	2.2
98	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	440	470	230	8.5
98	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	480	500	240	5.4
98	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	180	190	91	3.4
98	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	180	190	91	3.4
98	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	190	200	97	2.2
98	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	180	190	91	3.4
98	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	180	190	91	3.4
98	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	190	200	97	2.2
98	Guaiacols/Phenols	Phenol	FS	3	0	180	190	91	3.4
98	Guaiacols/Phenols	Phenol	WB	3	0	190	200	97	2.2
98	Metals	Aluminum	FS	3	1	1,000	5,000	2,000	870
98	Metals	Aluminum	WB	3	0	5,000	20,000	7,500	4,300
98	Metals	Antimony	FS	3	0	50	50	25	0.00
98	Metals	Antimony	WB	3	0	50	50	25	0.00

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
98	Metals	Arsenic	FS	3	3	83	98	91	7.6
98	Metals	Arsenic	WB	3	3	120	140	130	12
98	Metals	Barium	FS	3	3	460	710	580	130
98	Metals	Barium	WB	3	3	870	1,400	1,100	270
98	Metals	Beryllium	FS	3	0	4.0	6.0	2.3	0.58
98	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
98	Metals	Cadmium	FS	3	1	4.0	5.7	3.2	2.1
98	Metals	Cadmium	WB	3	3	13	14	13	0.58
98	Metals	Chromium	FS	3	0	100	100	50	0.00
98	Metals	Chromium	WB	3	3	170	240	210	38
98	Metals	Cobalt	FS	3	3	17	22	20	2.6
98	Metals	Cobalt	WB	3	3	130	220	170	46
98	Metals	Copper	FS	3	3	610	630	610	12
98	Metals	Copper	WB	3	3	800	1,300	1,000	240
98	Metals	Lead	FS	3	1	10	11	7.0	3.5
98	Metals	Lead	WB	3	3	120	140	130	8.7
98	Metals	Manganese	FS	3	3	1,500	2,100	1,700	290
98	Metals	Manganese	WB	3	3	6,400	9,100	7,300	1,500
98	Metals	Mercury	FS	3	3	71	110	92	19
98	Metals	Mercury	WB	3	3	82	190	120	58
98	Metals	Nickel	FS	3	3	52	75	60	13
98	Metals	Nickel	WB	3	3	55	82	71	14
98	Metals	Selenium	FS	3	3	200	220	210	12
98	Metals	Selenium	WB	3	3	250	260	260	5.8
98	Metals	Silver	FS	3	0	100	200	67	29
98	Metals	Silver	WB	3	0	100	100	50	0.00
98	Metals	Thallium	FS	3	0	50	50	25	0.00
98	Metals	Thallium	WB	3	0	50	50	25	0.00
98	Metals	Vanadium	FS	3	1	18	20	13	4.6
98	Metals	Vanadium	WB	3	3	100	200	150	48
98	Metals	Zinc	FS	3	3	19,000	21,000	20,000	1,400
98	Metals	Zinc	WB	3	3	22,000	27,000	24,000	2,400
98	PCBs	Aroclor 1016	FS	3	0	19	21	10	0.50
98	PCBs	Aroclor 1016	WB	3	0	17	20	9.3	0.76
98	PCBs	Aroclor 1221	FS	3	0	19	21	10	0.50
98	PCBs	Aroclor 1221	WB	3	0	17	20	9.3	0.76
98	PCBs	Aroclor 1232	FS	3	0	19	21	10	0.50
98	PCBs	Aroclor 1232	WB	3	0	17	20	9.3	0.76
98	PCBs	Aroclor 1242	FS	3	0	19	21	10	0.50
98	PCBs	Aroclor 1242	WB	3	0	17	20	9.3	0.76
98	PCBs	Aroclor 1248	FS	3	0	19	21	10	0.50
98	PCBs	Aroclor 1248	WB	3	0	17	20	9.3	0.76
98	PCBs	Aroclor 1254	FS	3	1	14	20	11	2.5
98	PCBs	Aroclor 1254	WB	3	2	20	58	38	25
98	PCBs	Aroclor 1260	FS	3	0	19	21	10	0.50
98	PCBs	Aroclor 1260	WB	3	0	17	20	9.3	0.76
98	PCBs	PCB 77	FS	3	3	0.012	0.024	0.017	0.0061
98	PCBs	PCB 77	WB	3	3	0.038	0.041	0.040	0.0016
98	PCBs	PCB 105	FS	3	3	0.32	0.59	0.44	0.14
98	PCBs	PCB 105	WB	3	3	0.95	1.2	1.1	0.13
98	PCBs	PCB 114	FS	3	3	0.024	0.046	0.034	0.011
98	PCBs	PCB 114	WB	3	3	0.068	0.079	0.072	0.0059
98	PCBs	PCB 118	FS	3	3	0.75	1.3	1.0	0.28
98	PCBs	PCB 118	WB	3	3	2.2	2.7	2.4	0.26
98	PCBs	PCB 123	FS	3	3	0.011	0.022	0.017	0.0057
98	PCBs	PCB 123	WB	3	3	0.032	0.036	0.034	0.0022
98	PCBs	PCB 126	FS	3	3	0.0023	0.0037	0.0030	0.00070
98	PCBs	PCB 126	WB	3	3	0.0072	0.0081	0.0076	0.00047
98	PCBs	PCB 156	FS	3	3	0.12	0.22	0.16	0.051
98	PCBs	PCB 156	WB	3	3	0.38	0.42	0.40	0.019
98	PCBs	PCB 157	FS	3	3	0.023	0.043	0.031	0.011
98	PCBs	PCB 157	WB	3	3	0.071	0.085	0.077	0.0073
98	PCBs	PCB 167	FS	3	3	0.055	0.099	0.075	0.022
98	PCBs	PCB 167	WB	3	3	0.17	0.18	0.17	0.0071
98	PCBs	PCB 169	FS	3	0	0.00050	0.0015	0.00042	0.00029
98	PCBs	PCB 169	WB	3	0	0.0010	0.0010	0.00050	0.00
98	PCBs	PCB 170	FS	3	3	0.18	0.37	0.26	0.098
98	PCBs	PCB 170	WB	3	3	0.53	0.59	0.57	0.032
98	PCBs	PCB 180	FS	3	3	0.55	1.1	0.81	0.29
98	PCBs	PCB 180	WB	3	3	1.6	2.0	1.8	0.17
98	PCBs	PCB 189	FS	3	3	0.0075	0.015	0.011	0.0037
98	PCBs	PCB 189	WB	3	3	0.023	0.029	0.026	0.0031
98	Pesticides	Aldrin	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	Aldrin	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	Alpha-BHC	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	Alpha-BHC	WB	3	0	1.7	2.0	0.93	0.076

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
98	Pesticides	Alpha-Chlordene	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	Alpha-Chlordene	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	Beta-BHC	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	Beta-BHC	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	cis-Nonachlor	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	cis-Nonachlor	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	DDD-o,p'	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	DDD-o,p'	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	DDE-o,p'	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	DDE-o,p'	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	DDT-o,p'	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	DDT-o,p'	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	DDD-p,p'	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	DDD-p,p'	WB	3	3	1.6	2.7	2.1	0.55
98	Pesticides	DDE-p,p'	FS	3	3	14	31	20	9.3
98	Pesticides	DDE-p,p'	WB	3	3	41	53	49	6.7
98	Pesticides	DDT-p,p'	FS	3	1	1.9	2.5	1.5	0.88
98	Pesticides	DDT-p,p'	WB	3	2	1.1	2.0	1.2	0.21
98	Pesticides	DDMU	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	DDMU	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	Delta-BHC	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	Delta-BHC	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	Endosulfan Sulfate	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	Endosulfan Sulfate	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	Gamma-Chlordane	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	Gamma-Chlordene	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	Gamma-Chlordene	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	Heptachlor	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	Heptachlor	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	Heptachlor Epoxide	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	Heptachlor Epoxide	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	Hexachlorobenzene	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	Hexachlorobenzene	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	Lindane	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	Lindane	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	Mirex	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	Mirex	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	Oxychlordane	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	Oxychlordane	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	Pentachloroanisol	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	Pentachloroanisol	WB	3	0	1.7	2.0	0.93	0.076
98	Pesticides	Toxaphene	FS	3	0	58	64	30	1.6
98	Pesticides	Toxaphene	WB	3	0	51	60	28	2.3
98	Pesticides	trans-Nonachlor	FS	3	0	1.9	2.1	1.0	0.050
98	Pesticides	trans-Nonachlor	WB	3	0	1.7	2.0	0.93	0.076
98	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	22	24	11	0.42
98	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	4.8	4.9	2.4	0.029
98	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	22	24	11	0.42
98	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	4.8	95	17	26
98	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	44	47	23	0.81
98	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	9.5	9.9	4.8	0.10
98	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	88	95	45	1.7
98	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	19	20	9.7	0.22
98	Semivolatiles	2-Chloronaphthalene	FS	3	0	44	47	23	0.81
98	Semivolatiles	2-Chloronaphthalene	WB	3	0	4.8	4.9	2.4	0.029
98	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	22	24	11	0.42
98	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	4.8	95	17	26
98	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	22	24	11	0.42
98	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	4.8	4.9	2.4	0.029
98	Semivolatiles	Acenaphthene	FS	3	0	44	47	23	0.81
98	Semivolatiles	Acenaphthene	WB	3	1	9.6	37	16	19
98	Semivolatiles	Acenaphthylene	FS	3	0	22	24	11	0.42
98	Semivolatiles	Acenaphthylene	WB	3	2	2.8	6.5	3.9	2.3
98	Semivolatiles	Anthracene	FS	3	0	22	24	11	0.42
98	Semivolatiles	Anthracene	WB	3	0	4.8	95	17	26
98	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	22	24	11	0.42
98	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	4.8	4.9	2.4	0.029
98	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	22	24	11	0.42
98	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	4.8	4.9	2.4	0.029
98	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	22	24	11	0.42
98	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	4.8	4.9	2.4	0.029
98	Semivolatiles	Benzo(a)anthracene	FS	3	0	22	24	11	0.42
98	Semivolatiles	Benzo(a)anthracene	WB	3	0	4.8	99	33	27

Appendix D-1: Site Summary Statistics
Largescale Sucker

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
98	Semivolatiles	Benzo(a)pyrene	FS	3	0	22	24	11	0.42
98	Semivolatiles	Benzo(a)pyrene	WB	3	0	95	99	48	1.0
98	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	44	47	23	0.81
98	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	190	200	97	2.2
98	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	22	24	11	0.42
98	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	190	200	97	2.2
98	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	22	24	11	0.42
98	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	190	200	97	2.2
98	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	44	47	23	0.81
98	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	9.5	9.9	4.8	0.10
98	Semivolatiles	Chrysene	FS	3	0	22	24	11	0.42
98	Semivolatiles	Chrysene	WB	3	0	4.8	99	33	27
98	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	44	47	23	0.81
98	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	190	200	97	2.2
98	Semivolatiles	Dibenzofuran	FS	3	0	22	24	11	0.42
98	Semivolatiles	Dibenzofuran	WB	3	0	4.8	4.9	2.4	0.029
98	Semivolatiles	Fluoranthene	FS	3	0	44	47	23	0.81
98	Semivolatiles	Fluoranthene	WB	3	0	9.6	190	35	52
98	Semivolatiles	9H-Fluorene	FS	3	0	22	24	11	0.42
98	Semivolatiles	9H-Fluorene	WB	3	0	4.8	4.9	2.4	0.029
98	Semivolatiles	Hexachlorobutadiene	FS	3	0	22	24	11	0.42
98	Semivolatiles	Hexachlorobutadiene	WB	3	0	4.8	4.9	2.4	0.029
98	Semivolatiles	Hexachloroethane	FS	3	0	22	24	11	0.42
98	Semivolatiles	Hexachloroethane	WB	3	0	4.8	130	23	35
98	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	44	47	23	0.81
98	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	190	200	97	2.2
98	Semivolatiles	Naphthalene	FS	3	0	22	28	12	1.4
98	Semivolatiles	Naphthalene	WB	3	0	20	34	14	3.7
98	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	22	24	11	0.42
98	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	4.8	4.9	2.4	0.029
98	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	22	24	11	0.42
98	Semivolatiles	Naphthalene, 2-methyl-	WB	3	2	4.8	10	6.7	3.9
98	Semivolatiles	Nitrobenzene	FS	3	0	22	24	11	0.42
98	Semivolatiles	Nitrobenzene	WB	3	0	4.8	4.9	2.4	0.029
98	Semivolatiles	Phenanthrene	FS	3	0	22	24	11	0.42
98	Semivolatiles	Phenanthrene	WB	3	0	6.8	95	18	25
98	Semivolatiles	Pyrene	FS	3	0	44	47	23	0.81
98	Semivolatiles	Pyrene	WB	3	2	5.5	9.6	5.6	0.85
98	Semivolatiles	Retene	FS	3	0	44	47	23	0.81
98	Semivolatiles	Retene	WB	3	2	19	200	52	42

Appendix D-1: Site Summary Statistics
Mountain Whitefish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Dioxin/furans	2,3,7,8-TCDD	FS	3	2	0.000050	0.00018	0.00011	0.000079
48	Dioxin/furans	2,3,7,8-TCDD	WB	3	3	0.00014	0.00023	0.00019	0.000045
48	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000020	0.00023	0.00015	0.00012
48	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	2	0.000030	0.00027	0.00016	0.00013
48	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	1	0.000030	0.000070	0.000037	0.000023
48	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	2	0.000010	0.000070	0.000045	0.000035
48	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.00011	0.00022	0.00017	0.000055
48	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000030	0.00029	0.00017	0.00014
48	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	0	0.000010	0.000070	0.000018	0.000015
48	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000010	0.000090	0.000052	0.000043
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.00015	0.00038	0.00027	0.00012
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00025	0.00038	0.00033	0.000068
48	Dioxin/furans	OCDD	FS	3	2	0.000090	0.0016	0.00066	0.00083
48	Dioxin/furans	OCDD	WB	3	2	0.000010	0.00061	0.00036	0.00032
48	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.0033	0.0043	0.0038	0.00052
48	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.0051	0.0062	0.0056	0.00054
48	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	2	0.000060	0.00013	0.000087	0.000051
48	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.00011	0.00015	0.00013	0.000021
48	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	2	0.000020	0.00023	0.00014	0.00012
48	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00025	0.00036	0.00030	0.000057
48	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	1	0.000020	0.000060	0.000023	0.000012
48	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	2	0.000010	0.000050	0.000032	0.000024
48	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	1	0.000020	0.000060	0.000020	0.000010
48	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	2	0.000010	0.000060	0.000035	0.000028
48	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000020	0.000060	0.000017	0.000012
48	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
48	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	1	0.000020	0.000060	0.000027	0.000015
48	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.000030	0.000050	0.000037	0.000012
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000020	0.00010	0.000032	0.000020
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000030	0.000080	0.000025	0.000013
48	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000020	0.00010	0.000032	0.000020
48	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000030	0.000080	0.000025	0.000013
48	Dioxin/furans	OCDF	FS	3	1	0.000050	0.000090	0.000043	0.0000076
48	Dioxin/furans	OCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
48	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	770	990	450	59
48	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	800	990	460	51
48	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	770	990	450	59
48	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	800	990	460	51
48	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	770	990	450	59
48	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	800	990	460	51
48	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	770	990	450	59
48	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	800	990	460	51
48	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	770	990	450	59
48	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	800	990	460	51
48	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	310	400	180	24
48	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	320	400	180	20
48	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	770	990	450	59
48	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	800	990	460	51
48	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	310	400	180	24
48	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	320	400	180	20
48	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	310	400	180	24
48	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	320	400	180	20
48	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	310	400	180	24
48	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	320	400	180	20
48	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	310	400	180	24
48	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	320	400	180	20
48	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	770	990	450	59
48	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	800	990	460	51
48	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	310	400	180	24
48	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	320	400	180	20
48	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	310	400	180	24
48	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	320	400	180	20
48	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	310	400	180	24
48	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	320	400	180	20
48	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	310	400	180	24
48	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	320	400	180	20
48	Guaiacols/Phenols	Phenol	FS	3	0	310	400	180	24
48	Guaiacols/Phenols	Phenol	WB	3	0	320	400	180	20
48	Metals	Aluminum	FS	3	2	510	1,400	800	500
48	Metals	Aluminum	WB	3	3	1,800	5,600	4,100	2,000
48	Metals	Antimony	FS	3	0	50	50	25	0.00
48	Metals	Antimony	WB	3	0	50	50	25	0.00
48	Metals	Arsenic	FS	3	3	110	120	110	5.8
48	Metals	Arsenic	WB	3	3	120	130	130	5.8
48	Metals	Barium	FS	3	3	230	380	310	75
48	Metals	Barium	WB	3	3	610	680	640	32

Appendix D-1: Site Summary Statistics
Mountain Whitefish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
48	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
48	Metals	Cadmium	FS	3	3	9.0	14	12	2.9
48	Metals	Cadmium	WB	3	3	47	54	50	3.6
48	Metals	Chromium	FS	3	0	100	100	50	0.00
48	Metals	Chromium	WB	3	2	100	210	120	81
48	Metals	Cobalt	FS	3	3	81	93	88	6.4
48	Metals	Cobalt	WB	3	3	160	200	180	23
48	Metals	Copper	FS	3	3	640	640	640	4.0
48	Metals	Copper	WB	3	3	660	730	690	37
48	Metals	Lead	FS	3	3	16	21	18	2.5
48	Metals	Lead	WB	3	3	31	43	38	6.2
48	Metals	Manganese	FS	3	3	1,000	1,500	1,200	240
48	Metals	Manganese	WB	3	3	2,900	5,100	3,900	1,100
48	Metals	Mercury	FS	3	3	120	140	130	6.7
48	Metals	Mercury	WB	3	2	100	130	92	39
48	Metals	Nickel	FS	3	1	30	40	23	14
48	Metals	Nickel	WB	3	3	40	180	100	72
48	Metals	Selenium	FS	3	3	670	720	690	25
48	Metals	Selenium	WB	3	3	940	1,000	1,000	49
48	Metals	Silver	FS	3	0	100	100	50	0.00
48	Metals	Silver	WB	3	0	100	100	50	0.00
48	Metals	Thallium	FS	3	0	50	50	25	0.00
48	Metals	Thallium	WB	3	0	50	50	25	0.00
48	Metals	Vanadium	FS	3	2	20	40	25	15
48	Metals	Vanadium	WB	3	3	74	150	120	43
48	Metals	Zinc	FS	3	3	13,000	14,000	13,000	320
48	Metals	Zinc	WB	3	3	25,000	27,000	26,000	1,100
48	PCBs	Aroclor 1016	FS	3	0	18	19	9.3	0.29
48	PCBs	Aroclor 1016	WB	3	0	18	19	9.3	0.29
48	PCBs	Aroclor 1221	FS	3	0	18	19	9.3	0.29
48	PCBs	Aroclor 1221	WB	3	0	18	19	9.3	0.29
48	PCBs	Aroclor 1232	FS	3	0	18	19	9.3	0.29
48	PCBs	Aroclor 1232	WB	3	0	18	19	9.3	0.29
48	PCBs	Aroclor 1242	FS	3	0	18	19	9.3	0.29
48	PCBs	Aroclor 1242	WB	3	0	18	19	9.3	0.29
48	PCBs	Aroclor 1248	FS	3	0	18	19	9.3	0.29
48	PCBs	Aroclor 1248	WB	3	0	18	19	9.3	0.29
48	PCBs	Aroclor 1254	FS	3	3	47	58	53	5.5
48	PCBs	Aroclor 1254	WB	3	3	34	46	39	6.1
48	PCBs	Aroclor 1260	FS	3	3	98	190	140	47
48	PCBs	Aroclor 1260	WB	3	3	92	130	110	20
48	PCBs	PCB 77	FS	3	3	0.11	0.14	0.13	0.017
48	PCBs	PCB 77	WB	3	3	0.15	0.18	0.16	0.016
48	PCBs	PCB 105	FS	3	3	2.9	3.1	3.0	0.12
48	PCBs	PCB 105	WB	3	3	3.4	3.6	3.5	0.11
48	PCBs	PCB 114	FS	3	3	0.22	0.25	0.23	0.016
48	PCBs	PCB 114	WB	3	3	0.25	0.34	0.29	0.042
48	PCBs	PCB 118	FS	3	3	6.3	6.5	6.4	0.10
48	PCBs	PCB 118	WB	3	3	6.6	7.2	7.0	0.31
48	PCBs	PCB 123	FS	3	3	0.092	0.11	0.097	0.0071
48	PCBs	PCB 123	WB	3	3	0.098	0.14	0.12	0.022
48	PCBs	PCB 126	FS	3	1	0.0056	0.016	0.0072	0.0075
48	PCBs	PCB 126	WB	3	1	0.0042	0.028	0.011	0.015
48	PCBs	PCB 156	FS	3	3	1.4	1.6	1.5	0.087
48	PCBs	PCB 156	WB	3	3	1.2	1.6	1.5	0.27
48	PCBs	PCB 157	FS	3	3	0.26	0.29	0.28	0.014
48	PCBs	PCB 157	WB	3	3	0.21	0.31	0.27	0.053
48	PCBs	PCB 167	FS	3	3	0.58	0.70	0.64	0.062
48	PCBs	PCB 167	WB	3	3	0.51	0.74	0.66	0.13
48	PCBs	PCB 169	FS	3	0	0.0024	0.0038	0.0016	0.00036
48	PCBs	PCB 169	WB	3	0	0.0025	0.0039	0.0015	0.00036
48	PCBs	PCB 170	FS	3	3	2.7	3.6	3.1	0.46
48	PCBs	PCB 170	WB	3	3	2.1	3.6	3.0	0.84
48	PCBs	PCB 180	FS	3	3	9.9	14	11	2.5
48	PCBs	PCB 180	WB	3	3	7.1	14	11	3.5
48	PCBs	PCB 189	FS	3	3	0.11	0.18	0.14	0.033
48	PCBs	PCB 189	WB	3	3	0.095	0.25	0.17	0.079
48	Pesticides	Aldrin	FS	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Aldrin	WB	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Alpha-BHC	FS	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Alpha-BHC	WB	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Alpha-Chlordene	FS	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Alpha-Chlordene	WB	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Beta-BHC	FS	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Beta-BHC	WB	3	0	1.8	1.9	0.93	0.029

Appendix D-1: Site Summary Statistics
Mountain Whitefish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.8	1.9	0.93	0.029
48	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.8	1.9	0.93	0.029
48	Pesticides	cis-Nonachlor	FS	3	3	8.6	15	11	3.4
48	Pesticides	cis-Nonachlor	WB	3	3	6.0	10	8.2	2.0
48	Pesticides	DDD-o,p'	FS	3	3	3.5	6.7	5.0	1.6
48	Pesticides	DDD-o,p'	WB	3	3	4.9	6.3	5.7	0.71
48	Pesticides	DDE-o,p'	FS	3	3	7.6	11	9.4	1.7
48	Pesticides	DDE-o,p'	WB	3	2	1.9	8.9	6.2	4.5
48	Pesticides	DDT-o,p'	FS	3	0	1.8	1.9	0.93	0.029
48	Pesticides	DDT-o,p'	WB	3	0	1.8	1.9	0.93	0.029
48	Pesticides	DDD-p,p'	FS	3	3	37	56	46	9.6
48	Pesticides	DDD-p,p'	WB	3	3	47	58	54	5.9
48	Pesticides	DDE-p,p'	FS	3	3	580	910	760	170
48	Pesticides	DDE-p,p'	WB	3	3	580	770	660	97
48	Pesticides	DDT-p,p'	FS	3	3	44	58	50	7.4
48	Pesticides	DDT-p,p'	WB	3	3	31	49	41	9.2
48	Pesticides	DDMU	FS	3	3	16	28	23	6.2
48	Pesticides	DDMU	WB	3	3	22	27	24	2.5
48	Pesticides	Delta-BHC	FS	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Delta-BHC	WB	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Endosulfan Sulfate	FS	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Endosulfan Sulfate	WB	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Gamma-Chlordane	FS	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Gamma-Chlordane	WB	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Gamma-Chlordane	FS	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Gamma-Chlordane	WB	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Heptachlor	FS	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Heptachlor	WB	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Heptachlor Epoxide	FS	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Heptachlor Epoxide	WB	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Hexachlorobenzene	FS	3	3	0.84	1.3	1.1	0.24
48	Pesticides	Hexachlorobenzene	WB	3	3	0.94	1.2	1.0	0.14
48	Pesticides	Lindane	FS	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Lindane	WB	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Mirex	FS	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Mirex	WB	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Oxychlordane	FS	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Oxychlordane	WB	3	0	1.8	1.9	0.93	0.029
48	Pesticides	Pentachloroanisol	FS	3	2	1.5	1.9	1.4	0.50
48	Pesticides	Pentachloroanisol	WB	3	2	1.7	2.1	1.6	0.61
48	Pesticides	Toxaphene	FS	3	0	54	58	28	1.0
48	Pesticides	Toxaphene	WB	3	0	54	57	28	0.76
48	Pesticides	trans-Nonachlor	FS	3	3	4.1	7.4	5.6	1.7
48	Pesticides	trans-Nonachlor	WB	3	3	3.0	5.5	4.2	1.3
48	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	15	20	9.0	1.2
48	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	16	20	9.2	1.0
48	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	31	40	18	2.4
48	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	32	40	18	2.0
48	Semivolatiles	2-Chloronaphthalene	FS	3	0	15	20	9.0	1.2
48	Semivolatiles	2-Chloronaphthalene	WB	3	0	16	20	9.2	1.0
48	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	Acenaphthene	FS	3	0	15	20	9.0	1.2
48	Semivolatiles	Acenaphthene	WB	3	1	16	31	17	12
48	Semivolatiles	Acenaphthylene	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	Acenaphthylene	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	Anthracene	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	Anthracene	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	Benzo(a)anthracene	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	Benzo(a)pyrene	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	15	20	9.0	1.2
48	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	16	20	9.2	1.0

Appendix D-1: Site Summary Statistics
Mountain Whitefish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	15	20	9.0	1.2
48	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	16	20	9.2	1.0
48	Semivolatiles	Chrysene	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	Chrysene	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	15	20	9.0	1.2
48	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	16	20	9.2	1.0
48	Semivolatiles	Dibenzofuran	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	Dibenzofuran	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	Fluoranthene	FS	3	0	15	20	9.0	1.2
48	Semivolatiles	Fluoranthene	WB	3	0	16	20	9.2	1.0
48	Semivolatiles	9H-Fluorene	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	9H-Fluorene	WB	3	0	8.0	13	5.1	1.3
48	Semivolatiles	Hexachlorobutadiene	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	Hexachloroethane	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	Hexachloroethane	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	15	20	9.0	1.2
48	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	16	20	9.2	1.0
48	Semivolatiles	Naphthalene	FS	3	0	9.4	15	5.6	1.5
48	Semivolatiles	Naphthalene	WB	3	0	8.6	13	5.5	1.0
48	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.0	10	4.7	0.60
48	Semivolatiles	Nitrobenzene	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	Nitrobenzene	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	Phenanthrene	FS	3	0	7.7	9.9	4.5	0.58
48	Semivolatiles	Phenanthrene	WB	3	0	8.0	9.9	4.6	0.51
48	Semivolatiles	Pyrene	FS	3	0	15	20	9.0	1.2
48	Semivolatiles	Pyrene	WB	3	0	16	20	9.2	1.0
48	Semivolatiles	Retene	FS	3	0	15	20	9.0	1.2
48	Semivolatiles	Retene	WB	3	0	16	20	9.2	1.0
98	Dioxin/furans	2,3,7,8-TCDD	FS	3	3	0.000050	0.000070	0.000060	0.000010
98	Dioxin/furans	2,3,7,8-TCDD	WB	3	2	0.000050	0.000080	0.000058	0.000029
98	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	3	0.00016	0.00020	0.00018	0.000020
98	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	2	0.000030	0.00024	0.00015	0.00012
98	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	2	0.000010	0.00013	0.000088	0.000072
98	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	3	0.00012	0.00015	0.00013	0.000015
98	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.00015	0.00020	0.00017	0.000026
98	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	3	0.00022	0.00027	0.00024	0.000029
98	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	3	0.000060	0.00011	0.000087	0.000025
98	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000070	0.000090	0.000068	0.000029
98	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.00023	0.00028	0.00026	0.000028
98	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00035	0.00041	0.00039	0.000035
98	Dioxin/furans	OCDD	FS	3	3	0.00024	0.00052	0.00040	0.00014
98	Dioxin/furans	OCDD	WB	3	3	0.00042	0.00057	0.00049	0.000075
98	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00051	0.00069	0.00062	0.000095
98	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00095	0.0012	0.0011	0.00015
98	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.000060	0.00010	0.000080	0.000020
98	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	2	0.000040	0.000080	0.000057	0.000032
98	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.000060	0.00011	0.000083	0.000025
98	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.000090	0.00010	0.000097	0.000058
98	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	3	0.000030	0.000050	0.000040	0.000010
98	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	1	0.000040	0.000090	0.000038	0.000076
98	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000040	0.000060	0.000050	0.000010
98	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	1	0.000040	0.000090	0.000038	0.000076
98	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	3	0.000080	0.00015	0.00011	0.000033
98	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	3	0.000070	0.00015	0.00011	0.000040
98	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	3	0.00014	0.00016	0.00015	0.000010
98	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00013	0.00017	0.00016	0.000023
98	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	3	0.000070	0.00011	0.000090	0.000020
98	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000060	0.00010	0.000077	0.000040
98	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	3	0.000020	0.000060	0.000040	0.000020
98	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	1	0.000020	0.000080	0.000030	0.000010
98	Dioxin/furans	OCDF	FS	3	3	0.000030	0.00010	0.000067	0.000035
98	Dioxin/furans	OCDF	WB	3	1	0.000040	0.000090	0.000040	0.000050
98	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	430	490	230	14
98	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	420	480	230	15
98	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	430	490	230	14
98	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	420	480	230	15
98	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	430	490	230	14
98	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	420	480	230	15

Appendix D-1: Site Summary Statistics
Mountain Whitefish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
98	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	430	490	230	14
98	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	420	480	230	15
98	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	430	490	230	14
98	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	420	480	230	15
98	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	170	200	92	5.8
98	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	170	190	91	6.0
98	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	430	490	230	14
98	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	420	480	230	15
98	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	170	200	92	5.8
98	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	170	190	91	6.0
98	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	170	200	92	5.8
98	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	170	190	91	6.0
98	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	170	200	92	5.8
98	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	170	190	91	6.0
98	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	170	200	92	5.8
98	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	170	190	91	6.0
98	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	430	490	230	14
98	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	420	480	230	15
98	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	1	0	190	190	93	na
98	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	0	0	0.00	0.00	0.00	0.00
98	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	170	200	92	5.8
98	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	170	190	91	6.0
98	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	1	0	190	190	93	na
98	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	0	0	0.00	0.00	0.00	0.00
98	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	170	200	92	5.8
98	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	170	190	91	6.0
98	Guaiacols/Phenols	Phenol	FS	3	0	170	200	92	5.8
98	Guaiacols/Phenols	Phenol	WB	3	0	170	190	91	6.0
98	Metals	Aluminum	FS	3	0	5,000	20,000	6,300	3,800
98	Metals	Aluminum	WB	3	2	9,100	22,000	14,000	6,900
98	Metals	Antimony	FS	3	0	50	50	25	0.00
98	Metals	Antimony	WB	3	0	50	50	25	0.00
98	Metals	Arsenic	FS	3	3	51	73	64	11
98	Metals	Arsenic	WB	3	3	130	140	140	5.8
98	Metals	Barium	FS	3	2	200	320	220	110
98	Metals	Barium	WB	3	3	500	940	740	220
98	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
98	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
98	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
98	Metals	Cadmium	WB	3	3	4.2	6.3	5.5	1.1
98	Metals	Chromium	FS	3	0	100	100	50	0.00
98	Metals	Chromium	WB	3	2	100	110	87	32
98	Metals	Cobalt	FS	3	3	30	40	34	5.3
98	Metals	Cobalt	WB	3	3	84	110	95	13
98	Metals	Copper	FS	3	3	560	580	570	13
98	Metals	Copper	WB	3	3	1,100	5,000	2,500	2,200
98	Metals	Lead	FS	3	3	12	19	14	3.8
98	Metals	Lead	WB	3	3	18	44	27	15
98	Metals	Manganese	FS	3	3	670	900	760	130
98	Metals	Manganese	WB	3	3	4,200	4,600	4,300	230
98	Metals	Mercury	FS	3	3	71	98	80	15
98	Metals	Mercury	WB	3	3	49	120	74	38
98	Metals	Nickel	FS	3	3	41	81	56	22
98	Metals	Nickel	WB	3	3	230	1,300	620	630
98	Metals	Selenium	FS	3	3	300	360	340	30
98	Metals	Selenium	WB	3	3	590	670	630	44
98	Metals	Silver	FS	3	0	100	100	50	0.00
98	Metals	Silver	WB	3	0	100	100	50	0.00
98	Metals	Thallium	FS	3	0	50	50	25	0.00
98	Metals	Thallium	WB	3	0	50	50	25	0.00
98	Metals	Vanadium	FS	3	3	36	50	45	7.8
98	Metals	Vanadium	WB	3	3	240	290	250	27
98	Metals	Zinc	FS	3	3	17,000	20,000	18,000	1,700
98	Metals	Zinc	WB	3	3	32,000	40,000	35,000	4,200
98	PCBs	Aroclor 1016	FS	3	0	17	19	8.8	0.58
98	PCBs	Aroclor 1016	WB	3	0	18	20	9.5	0.50
98	PCBs	Aroclor 1221	FS	3	0	17	19	8.8	0.58
98	PCBs	Aroclor 1221	WB	3	0	18	20	9.5	0.50
98	PCBs	Aroclor 1232	FS	3	0	17	19	8.8	0.58
98	PCBs	Aroclor 1232	WB	3	0	18	20	9.5	0.50
98	PCBs	Aroclor 1242	FS	3	0	17	19	8.8	0.58
98	PCBs	Aroclor 1242	WB	3	0	18	20	9.5	0.50
98	PCBs	Aroclor 1248	FS	3	0	17	19	8.8	0.58
98	PCBs	Aroclor 1248	WB	3	0	18	20	9.5	0.50
98	PCBs	Aroclor 1254	FS	3	3	25	30	27	2.9
98	PCBs	Aroclor 1254	WB	3	3	36	46	42	5.5

Appendix D-1: Site Summary Statistics
Mountain Whitefish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
98	PCBs	Aroclor 1260	FS	3	0	17	19	8.8	0.58
98	PCBs	Aroclor 1260	WB	3	0	18	20	9.5	0.50
98	PCBs	PCB 77	FS	3	3	0.014	0.027	0.019	0.0069
98	PCBs	PCB 77	WB	3	3	0.033	0.044	0.038	0.0057
98	PCBs	PCB 105	FS	3	3	0.98	1.1	1.0	0.056
98	PCBs	PCB 105	WB	3	3	1.3	1.6	1.4	0.15
98	PCBs	PCB 114	FS	3	3	0.077	0.084	0.080	0.0040
98	PCBs	PCB 114	WB	3	3	0.095	0.12	0.10	0.011
98	PCBs	PCB 118	FS	3	3	2.1	2.4	2.3	0.17
98	PCBs	PCB 118	WB	3	3	0.027	3.3	2.0	1.7
98	PCBs	PCB 123	FS	3	3	0.021	0.028	0.026	0.0039
98	PCBs	PCB 123	WB	3	3	0.032	0.039	0.034	0.0041
98	PCBs	PCB 126	FS	3	3	0.0051	0.0064	0.0060	0.00074
98	PCBs	PCB 126	WB	3	3	0.0072	0.0099	0.0082	0.0014
98	PCBs	PCB 156	FS	3	3	0.33	0.39	0.37	0.033
98	PCBs	PCB 156	WB	3	3	0.39	0.47	0.41	0.046
98	PCBs	PCB 157	FS	3	3	0.060	0.072	0.067	0.0066
98	PCBs	PCB 157	WB	3	3	0.074	0.085	0.078	0.0063
98	PCBs	PCB 167	FS	3	3	0.12	0.13	0.13	0.0073
98	PCBs	PCB 167	WB	3	3	0.14	0.17	0.15	0.015
98	PCBs	PCB 169	FS	3	0	0.0012	0.0021	0.00077	0.00023
98	PCBs	PCB 169	WB	3	0	0.0014	0.0019	0.00077	0.00014
98	PCBs	PCB 170	FS	3	3	0.26	0.34	0.31	0.045
98	PCBs	PCB 170	WB	3	3	0.27	0.41	0.33	0.072
98	PCBs	PCB 180	FS	3	3	0.67	0.89	0.80	0.12
98	PCBs	PCB 180	WB	3	3	0.70	1.1	0.86	0.20
98	PCBs	PCB 189	FS	3	3	0.013	0.015	0.014	0.0014
98	PCBs	PCB 189	WB	3	3	0.014	0.018	0.016	0.0023
98	Pesticides	Aldrin	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	Aldrin	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	Alpha-BHC	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	Alpha-BHC	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	Alpha-Chlordane	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	Alpha-Chlordane	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	Beta-BHC	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	Beta-BHC	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	cis-Nonachlor	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	cis-Nonachlor	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	DDD-o,p'	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	DDD-o,p'	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	DDE-o,p'	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	DDE-o,p'	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	DDT-o,p'	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	DDT-o,p'	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	DDD-p,p'	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	DDD-p,p'	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	DDE-p,p'	FS	3	3	8.0	10	8.7	1.1
98	Pesticides	DDE-p,p'	WB	3	3	13	17	15	2.1
98	Pesticides	DDT-p,p'	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	DDT-p,p'	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	DDMU	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	DDMU	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	Delta-BHC	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	Delta-BHC	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	Endosulfan Sulfate	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	Endosulfan Sulfate	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	Gamma-Chlordane	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	Gamma-Chlordane	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	Gamma-Chlordane	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	Gamma-Chlordane	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	Heptachlor	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	Heptachlor	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	Heptachlor Epoxide	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	Heptachlor Epoxide	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	Hexachlorobenzene	FS	3	0	1.7	1.9	0.92	0.058
98	Pesticides	Hexachlorobenzene	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	Lindane	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	Lindane	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	Mirex	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	Mirex	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	Oxychlordane	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	Oxychlordane	WB	3	0	1.8	2.0	0.95	0.050
98	Pesticides	Pentachloroanisol	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	Pentachloroanisol	WB	3	0	1.8	2.0	0.95	0.050

Appendix D-1: Site Summary Statistics
Mountain Whitefish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
98	Pesticides	Toxaphene	FS	3	0	50	56	26	1.6
98	Pesticides	Toxaphene	WB	3	0	55	60	29	1.3
98	Pesticides	trans-Nonachlor	FS	3	0	1.7	1.9	0.88	0.058
98	Pesticides	trans-Nonachlor	WB	3	0	1.8	2.0	0.95	0.050
98	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	22	25	12	0.74
98	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	4.2	4.8	2.3	0.15
98	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	22	25	12	0.74
98	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	4.2	4.8	2.3	0.15
98	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	43	49	23	1.5
98	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	8.4	9.6	4.5	0.31
98	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	87	98	46	2.9
98	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	17	19	9.1	0.60
98	Semivolatiles	2-Chloronaphthalene	FS	3	0	22	46	15	6.7
98	Semivolatiles	2-Chloronaphthalene	WB	3	0	4.2	4.8	2.3	0.15
98	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	22	25	12	0.74
98	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	4.2	4.8	2.3	0.15
98	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	22	25	12	0.74
98	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	4.2	4.8	2.3	0.15
98	Semivolatiles	Acenaphthene	FS	3	0	43	49	23	1.5
98	Semivolatiles	Acenaphthene	WB	3	0	8.4	9.6	4.5	0.31
98	Semivolatiles	Acenaphthylene	FS	3	0	22	25	12	0.74
98	Semivolatiles	Acenaphthylene	WB	3	0	4.2	4.8	2.3	0.15
98	Semivolatiles	Anthracene	FS	3	0	22	25	12	0.74
98	Semivolatiles	Anthracene	WB	3	0	4.2	4.8	2.3	0.15
98	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	22	25	12	0.74
98	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	4.3	4.8	2.3	0.13
98	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	22	25	12	0.74
98	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	4.2	4.8	2.3	0.15
98	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	22	25	12	0.74
98	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	4.2	4.8	2.3	0.15
98	Semivolatiles	Benzo(a)anthracene	FS	3	0	22	25	12	0.74
98	Semivolatiles	Benzo(a)anthracene	WB	3	0	4.2	4.8	2.3	0.15
98	Semivolatiles	Benzo(a)pyrene	FS	3	0	22	25	12	0.74
98	Semivolatiles	Benzo(a)pyrene	WB	3	0	84	96	45	3.0
98	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	43	49	23	1.5
98	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	170	190	91	6.0
98	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	23	49	19	6.8
98	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	170	190	91	6.0
98	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	23	49	19	6.8
98	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	170	190	91	6.0
98	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	43	49	23	1.5
98	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	8.4	9.6	4.5	0.31
98	Semivolatiles	Chrysene	FS	3	0	22	25	12	0.74
98	Semivolatiles	Chrysene	WB	3	0	4.2	4.8	2.3	0.15
98	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	43	49	23	1.5
98	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	170	190	91	6.0
98	Semivolatiles	Dibenzofuran	FS	3	0	22	25	12	0.74
98	Semivolatiles	Dibenzofuran	WB	3	0	4.2	4.8	2.3	0.15
98	Semivolatiles	Fluoranthene	FS	3	0	43	49	23	1.5
98	Semivolatiles	Fluoranthene	WB	3	0	8.4	9.6	4.5	0.31
98	Semivolatiles	9H-Fluorene	FS	3	0	22	25	12	0.74
98	Semivolatiles	9H-Fluorene	WB	3	0	4.2	4.8	2.3	0.15
98	Semivolatiles	Hexachlorobutadiene	FS	3	0	22	25	12	0.74
98	Semivolatiles	Hexachlorobutadiene	WB	3	0	4.2	4.8	2.3	0.15
98	Semivolatiles	Hexachloroethane	FS	3	0	22	25	12	0.74
98	Semivolatiles	Hexachloroethane	WB	3	0	4.2	4.8	2.3	0.15
98	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	43	49	23	1.5
98	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	170	190	91	6.0
98	Semivolatiles	Naphthalene	FS	3	0	22	25	12	0.74
98	Semivolatiles	Naphthalene	WB	3	0	25	30	14	1.2
98	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	22	25	12	0.74
98	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	4.2	4.8	2.3	0.15
98	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	22	25	12	0.74
98	Semivolatiles	Naphthalene, 2-methyl-	WB	3	3	7.3	8.9	7.8	0.92
98	Semivolatiles	Nitrobenzene	FS	3	0	22	25	12	0.74
98	Semivolatiles	Nitrobenzene	WB	3	0	4.2	4.8	2.3	0.15
98	Semivolatiles	Phenanthrene	FS	3	0	22	25	12	0.74
98	Semivolatiles	Phenanthrene	WB	3	0	4.4	5.9	2.5	0.38
98	Semivolatiles	Pyrene	FS	3	0	43	49	23	1.5
98	Semivolatiles	Pyrene	WB	3	0	8.4	9.6	4.5	0.31
98	Semivolatiles	Retene	FS	3	0	43	49	23	1.5
98	Semivolatiles	Retene	WB	3	1	8.4	20	9.7	9.0
101	Dioxin/furans	2,3,7,8-TCDD	FS	3	2	0.000010	0.000070	0.000042	0.000033
101	Dioxin/furans	2,3,7,8-TCDD	WB	3	2	0.000010	0.00010	0.000065	0.000052
101	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	3	0.00015	0.00016	0.00015	0.0000058
101	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.00018	0.00021	0.00020	0.000015

Appendix D-1: Site Summary Statistics
Mountain Whitefish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
101	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	3	0.00010	0.00010	0.00010	0.00
101	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	3	0.00011	0.00012	0.00011	0.0000058
101	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.00010	0.00013	0.00011	0.000017
101	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	3	0.00014	0.00018	0.00017	0.000023
101	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	3	0.000030	0.000050	0.000037	0.000012
101	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	3	0.000050	0.000060	0.000053	0.0000058
101	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.00019	0.00029	0.00023	0.000055
101	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00026	0.00031	0.00028	0.000025
101	Dioxin/furans	OCDD	FS	3	3	0.00021	0.00028	0.00024	0.000036
101	Dioxin/furans	OCDD	WB	3	3	0.00027	0.00035	0.00030	0.000046
101	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00014	0.00019	0.00016	0.000029
101	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00023	0.00033	0.00029	0.000055
101	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.000040	0.000050	0.000047	0.0000058
101	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.000060	0.000060	0.000060	0.00
101	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	2	0.000010	0.000060	0.000035	0.000028
101	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.000070	0.000090	0.000077	0.000012
101	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	1	0.000010	0.000020	0.000010	0.0000087
101	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	3	0.000030	0.000030	0.000030	0.00
101	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000030	0.000040	0.000033	0.0000058
101	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	3	0.000030	0.000040	0.000037	0.0000058
101	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	3	0.000060	0.000060	0.000060	0.00
101	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	1	0.000010	0.000060	0.000023	0.000032
101	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	3	0.00013	0.00014	0.00013	0.0000058
101	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00013	0.00014	0.00014	0.0000058
101	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000010	0.000090	0.000055	0.000044
101	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	3	0.000080	0.000090	0.000087	0.0000058
101	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
101	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	1	0.000010	0.000020	0.000010	0.0000087
101	Dioxin/furans	OCDF	FS	3	2	0.000010	0.000020	0.000015	0.0000087
101	Dioxin/furans	OCDF	WB	3	2	0.000010	0.000040	0.000022	0.000018
101	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	1,200	1,300	640	42
101	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	470	650	270	50
101	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	1,200	1,300	640	42
101	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	470	650	270	50
101	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	1,200	1,300	640	42
101	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	470	650	270	50
101	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	1,200	1,300	640	42
101	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	470	650	270	50
101	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	1,200	1,300	640	42
101	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	470	650	270	50
101	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	470	530	260	17
101	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	190	260	110	20
101	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	1,200	1,300	640	42
101	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	470	650	270	50
101	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	470	530	260	17
101	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	190	260	110	20
101	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	470	530	260	17
101	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	190	260	110	20
101	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	470	530	260	17
101	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	190	260	110	20
101	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	470	530	260	17
101	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	190	260	110	20
101	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	1,200	1,300	640	42
101	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	470	650	270	50
101	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	470	530	260	17
101	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	190	260	110	20
101	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	470	530	260	17
101	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	190	260	110	20
101	Guaiacols/Phenols	Phenol	FS	3	0	470	530	260	17
101	Guaiacols/Phenols	Phenol	WB	3	0	190	260	110	20
101	Metals	Aluminum	FS	3	3	1,300	3,100	2,000	910
101	Metals	Aluminum	WB	3	3	7,200	16,000	11,000	4,700
101	Metals	Antimony	FS	3	0	50	50	25	0.00
101	Metals	Antimony	WB	3	0	50	50	25	0.00
101	Metals	Arsenic	FS	3	3	93	110	100	8.5
101	Metals	Arsenic	WB	3	3	140	180	160	21
101	Metals	Barium	FS	3	3	230	310	270	40
101	Metals	Barium	WB	3	3	690	930	770	140
101	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
101	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
101	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
101	Metals	Cadmium	WB	3	2	4.0	10	6.3	4.0
101	Metals	Chromium	FS	3	2	100	120	93	38
101	Metals	Chromium	WB	3	3	110	120	110	5.8
101	Metals	Cobalt	FS	3	3	22	31	26	4.7
101	Metals	Cobalt	WB	3	3	52	61	55	4.9

Appendix D-1: Site Summary Statistics
Mountain Whitefish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
101	Metals	Copper	FS	3	3	720	840	760	65
101	Metals	Copper	WB	3	3	960	1,100	990	53
101	Metals	Lead	FS	3	0	10	10	5.0	0.00
101	Metals	Lead	WB	3	3	10	17	14	3.8
101	Metals	Manganese	FS	3	3	580	790	650	120
101	Metals	Manganese	WB	3	3	2,100	3,000	2,400	470
101	Metals	Mercury	FS	3	3	49	75	60	13
101	Metals	Mercury	WB	3	3	47	55	52	4.2
101	Metals	Nickel	FS	3	3	120	150	130	18
101	Metals	Nickel	WB	3	3	280	350	300	38
101	Metals	Selenium	FS	3	3	500	550	520	27
101	Metals	Selenium	WB	3	3	920	1,600	1,200	340
101	Metals	Silver	FS	3	0	100	100	50	0.00
101	Metals	Silver	WB	3	0	100	100	50	0.00
101	Metals	Thallium	FS	3	0	50	50	25	0.00
101	Metals	Thallium	WB	3	0	50	50	25	0.00
101	Metals	Vanadium	FS	3	3	24	37	30	6.6
101	Metals	Vanadium	WB	3	3	130	260	190	66
101	Metals	Zinc	FS	3	3	15,000	16,000	15,000	530
101	Metals	Zinc	WB	3	3	23,000	26,000	24,000	1,400
101	PCBs	Aroclor 1016	FS	3	0	16	19	8.8	0.76
101	PCBs	Aroclor 1016	WB	3	0	21	24	11	0.76
101	PCBs	Aroclor 1221	FS	3	0	16	19	8.8	0.76
101	PCBs	Aroclor 1221	WB	3	0	21	24	11	0.76
101	PCBs	Aroclor 1232	FS	3	0	16	19	8.8	0.76
101	PCBs	Aroclor 1232	WB	3	0	21	24	11	0.76
101	PCBs	Aroclor 1242	FS	3	0	16	19	8.8	0.76
101	PCBs	Aroclor 1242	WB	3	0	21	24	11	0.76
101	PCBs	Aroclor 1248	FS	3	0	16	19	8.8	0.76
101	PCBs	Aroclor 1248	WB	3	0	21	24	11	0.76
101	PCBs	Aroclor 1254	FS	3	0	16	19	8.8	0.76
101	PCBs	Aroclor 1254	WB	3	0	21	24	11	0.76
101	PCBs	Aroclor 1260	FS	3	2	8.5	22	13	7.5
101	PCBs	Aroclor 1260	WB	3	3	26	30	27	2.3
101	PCBs	PCB 77	FS	3	3	0.017	0.056	0.031	0.022
101	PCBs	PCB 77	WB	3	3	0.022	0.12	0.062	0.053
101	PCBs	PCB 105	FS	3	3	0.15	0.56	0.29	0.23
101	PCBs	PCB 105	WB	3	3	0.31	0.83	0.56	0.26
101	PCBs	PCB 114	FS	3	3	0.013	0.045	0.024	0.018
101	PCBs	PCB 114	WB	3	3	0.022	0.11	0.057	0.044
101	PCBs	PCB 118	FS	3	3	0.26	0.98	0.51	0.40
101	PCBs	PCB 118	WB	3	3	0.57	1.4	1.0	0.44
101	PCBs	PCB 123	FS	3	3	0.0075	0.023	0.013	0.0089
101	PCBs	PCB 123	WB	3	3	0.0100	0.049	0.028	0.020
101	PCBs	PCB 126	FS	3	0	0.00061	0.00069	0.00032	0.000022
101	PCBs	PCB 126	WB	3	0	0.00081	0.0017	0.00070	0.00025
101	PCBs	PCB 156	FS	3	3	0.052	0.18	0.097	0.072
101	PCBs	PCB 156	WB	3	3	0.13	0.28	0.20	0.074
101	PCBs	PCB 157	FS	3	1	0.00073	0.065	0.022	0.037
101	PCBs	PCB 157	WB	3	0	0.00068	0.0022	0.00063	0.00041
101	PCBs	PCB 167	FS	3	3	0.021	0.078	0.042	0.031
101	PCBs	PCB 167	WB	3	3	0.056	0.12	0.086	0.031
101	PCBs	PCB 169	FS	3	1	0.00050	0.0044	0.0016	0.0024
101	PCBs	PCB 169	WB	3	1	0.00054	0.0028	0.00088	0.00056
101	PCBs	PCB 170	FS	3	3	0.23	0.64	0.39	0.22
101	PCBs	PCB 170	WB	3	3	0.57	0.82	0.67	0.13
101	PCBs	PCB 180	FS	3	3	0.71	1.9	1.2	0.63
101	PCBs	PCB 180	WB	3	3	1.7	2.5	2.0	0.41
101	PCBs	PCB 189	FS	3	3	0.0061	0.020	0.011	0.0079
101	PCBs	PCB 189	WB	3	3	0.017	0.027	0.022	0.0053
101	Pesticides	Aldrin	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	Aldrin	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	Alpha-BHC	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	Alpha-BHC	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	Alpha-Chlordane	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	Alpha-Chlordane	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	Beta-BHC	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	Beta-BHC	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	cis-Nonachlor	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	cis-Nonachlor	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	DDD-o,p'	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	DDD-o,p'	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	DDE-o,p'	FS	3	1	2.3	2.9	1.8	1.00
101	Pesticides	DDE-o,p'	WB	3	1	2.7	3.0	1.9	0.72

Appendix D-1: Site Summary Statistics
Mountain Whitefish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
101	Pesticides	DDT-o,p'	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	DDT-o,p'	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	DDD-p,p'	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	DDD-p,p'	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	DDE-p,p'	FS	3	3	16	30	22	7.1
101	Pesticides	DDE-p,p'	WB	3	3	39	47	43	4.0
101	Pesticides	DDT-p,p'	FS	3	3	2.6	2.8	2.7	0.10
101	Pesticides	DDT-p,p'	WB	3	3	5.1	6.1	5.5	0.51
101	Pesticides	DDMU	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	DDMU	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	Delta-BHC	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	Delta-BHC	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	Endosulfan Sulfate	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	Endosulfan Sulfate	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	Gamma-Chlordane	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	Gamma-Chlordane	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	Gamma-Chlordene	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	Gamma-Chlordene	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	Heptachlor	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	Heptachlor	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	Heptachlor Epoxide	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	Heptachlor Epoxide	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	Hexachlorobenzene	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	Hexachlorobenzene	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	Lindane	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	Lindane	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	Mirex	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	Mirex	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	Oxychlordane	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	Oxychlordane	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	Pentachloroanisole	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	Pentachloroanisole	WB	3	0	2.6	3.0	1.4	0.10
101	Pesticides	Toxaphene	FS	3	0	67	73	35	1.6
101	Pesticides	Toxaphene	WB	3	0	78	89	42	2.8
101	Pesticides	trans-Nonachlor	FS	3	0	2.2	2.4	1.2	0.050
101	Pesticides	trans-Nonachlor	WB	3	0	2.6	3.0	1.4	0.10
101	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	24	27	13	0.82
101	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	9.4	13	5.4	0.99
101	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	47	53	26	1.7
101	Semivolatiles	2,6-Dinitrotoluene	WB	3	1	19	26	16	8.5
101	Semivolatiles	2-Chloronaphthalene	FS	3	0	24	27	13	0.82
101	Semivolatiles	2-Chloronaphthalene	WB	3	0	9.4	13	5.4	0.99
101	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	Acenaphthene	FS	3	0	24	27	13	0.82
101	Semivolatiles	Acenaphthene	WB	3	0	9.4	13	5.4	0.99
101	Semivolatiles	Acenaphthylene	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	Acenaphthylene	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	Anthracene	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	Anthracene	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	Benzo(a)anthracene	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	Benzo(a)anthracene	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	Benzo(a)pyrene	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	Benzo(a)pyrene	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	24	27	13	0.82
101	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	9.4	13	5.4	0.99
101	Semivolatiles	Benzo[b]fluoranthene	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	Benzo[b]fluoranthene	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	24	27	13	0.82
101	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	9.4	13	5.4	0.99
101	Semivolatiles	Chrysene	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	Chrysene	WB	3	0	4.7	6.5	2.7	0.49

Appendix D-1: Site Summary Statistics
Mountain Whitefish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
101	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	24	27	13	0.82
101	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	9.4	13	5.4	0.99
101	Semivolatiles	Dibenzofuran	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	Dibenzofuran	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	Fluoranthene	FS	3	0	24	27	13	0.82
101	Semivolatiles	Fluoranthene	WB	3	0	9.4	13	5.4	0.99
101	Semivolatiles	9H-Fluorene	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	9H-Fluorene	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	Hexachlorobutadiene	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	Hexachlorobutadiene	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	Hexachloroethane	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	Hexachloroethane	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	24	27	13	0.82
101	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	9.4	13	5.4	0.99
101	Semivolatiles	Naphthalene	FS	3	0	13	19	7.4	1.7
101	Semivolatiles	Naphthalene	WB	3	0	10	18	6.9	2.1
101	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	Nitrobenzene	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	Nitrobenzene	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	Phenanthrene	FS	3	0	12	13	6.4	0.42
101	Semivolatiles	Phenanthrene	WB	3	0	4.7	6.5	2.7	0.49
101	Semivolatiles	Pyrene	FS	3	0	24	27	13	0.82
101	Semivolatiles	Pyrene	WB	3	0	9.4	13	5.4	0.99
101	Semivolatiles	Retene	FS	3	0	24	27	13	0.82
101	Semivolatiles	Retene	WB	3	0	9.4	13	5.4	0.99
9e+	Dioxin/furans	2,3,7,8-TCDD	FS	3	3	0.00020	0.00021	0.00021	0.0000058
9e+	Dioxin/furans	2,3,7,8-TCDD	WB	January-00	January-00	0.00015	0.00021	0.00017	0.000032
9e+	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	3	0.00017	0.00018	0.00017	0.0000058
9e+	Dioxin/furans	1,2,3,7,8-PeCDD	WB	January-00	January-00	0.000020	0.00019	0.00012	0.000099
9e+	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	3	0.000030	0.000040	0.000033	0.0000058
9e+	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	January-00	January-00	0.000010	0.000090	0.000035	0.000048
9e+	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.00012	0.00013	0.00012	0.0000058
9e+	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	January-00	January-00	0.000010	0.00011	0.000047	0.000056
9e+	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000010	0.000060	0.000042	0.000032
9e+	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	January-00	January-00	0.000020	0.00011	0.000048	0.000054
9e+	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000010	0.00015	0.00010	0.000084
9e+	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	January-00	January-00	0.00013	0.00033	0.00025	0.00011
9e+	Dioxin/furans	OCDD	FS	3	3	0.00019	0.00028	0.00023	0.000047
9e+	Dioxin/furans	OCDD	WB	January-00	January-00	0.000010	0.00076	0.00033	0.00039
9e+	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.013	0.014	0.013	0.00038
9e+	Dioxin/furans	2,3,7,8-TCDF	WB	January-00	January-00	0.0090	0.012	0.011	0.0014
9e+	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.00012	0.00014	0.00013	0.000010
9e+	Dioxin/furans	1,2,3,7,8-PeCDF	WB	January-00	January-00	0.00011	0.00026	0.00016	0.000087
9e+	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00026	0.00035	0.00029	0.000049
9e+	Dioxin/furans	2,3,4,7,8-PeCDF	WB	January-00	January-00	0.00025	0.00036	0.00030	0.000056
9e+	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	3	0.000030	0.000040	0.000037	0.0000058
9e+	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	January-00	January-00	0.000020	0.000060	0.000033	0.000025
9e+	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	2	0.000010	0.000030	0.000018	0.000013
9e+	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	January-00	January-00	0.000020	0.000040	0.000023	0.000015
9e+	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	1	0.000010	0.000020	0.000010	0.0000087
9e+	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	January-00	January-00	0.000010	0.000020	0.000012	0.0000076
9e+	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
9e+	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	January-00	January-00	0.000030	0.000070	0.000047	0.000021
9e+	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000020	0.000030	0.000012	0.0000029
9e+	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	January-00	January-00	0.000010	0.00013	0.000027	0.000033
9e+	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000020	0.000030	0.000012	0.0000029
9e+	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	January-00	January-00	0.000020	0.00013	0.000038	0.000028
9e+	Dioxin/furans	OCDF	FS	3	2	0.000010	0.000050	0.000032	0.000024
9e+	Dioxin/furans	OCDF	WB	January-00	January-00	0.000040	0.00020	0.00010	0.000086
9e+	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	920	980	480	16
9e+	Guaiacols/Phenols	4-Chloroguaiacol	WB	January-00	January-00	890	990	470	26
9e+	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	920	980	480	16
9e+	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	January-00	January-00	890	990	470	26
9e+	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	920	980	480	16
9e+	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	January-00	January-00	890	990	470	26
9e+	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	920	980	480	16
9e+	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	January-00	January-00	890	990	470	26
9e+	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	920	980	480	16
9e+	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	January-00	January-00	890	990	470	26
9e+	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	370	390	190	6.3
9e+	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	January-00	January-00	360	400	190	10
9e+	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	920	980	480	16
9e+	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	January-00	January-00	890	990	470	26

Appendix D-1: Site Summary Statistics
Mountain Whitefish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
9e+	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	370	390	190	6.3
9e+	Guaiacols/Phenols	Tetrachloroguaiacol	WB	January-00	January-00	360	400	190	10
9e+	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	370	390	190	6.3
9e+	Guaiacols/Phenols	2-Chlorophenol	WB	January-00	January-00	360	400	190	10
9e+	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	370	390	190	6.3
9e+	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	January-00	January-00	360	400	190	10
9e+	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	370	390	190	6.3
9e+	Guaiacols/Phenols	2,4-Dichlorophenol	WB	January-00	January-00	360	400	190	10
9e+	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	920	980	480	16
9e+	Guaiacols/Phenols	2,4-Dimethylphenol	WB	January-00	January-00	890	990	470	26
9e+	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	370	390	190	6.3
9e+	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	January-00	January-00	360	400	190	10
9e+	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	370	390	190	6.3
9e+	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	January-00	January-00	360	400	190	10
9e+	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	370	390	190	6.3
9e+	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	January-00	January-00	360	400	190	10
9e+	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	370	390	190	6.3
9e+	Guaiacols/Phenols	Pentachlorophenol	WB	January-00	January-00	360	400	190	10
9e+	Guaiacols/Phenols	Phenol	FS	3	0	370	390	190	6.3
9e+	Guaiacols/Phenols	Phenol	WB	January-00	January-00	360	400	190	10
9e+	Metals	Aluminum	FS	3	2	1,000	2,200	1,300	840
9e+	Metals	Aluminum	WB	January-00	January-00	13,600	16,700	15,500	1,600
9e+	Metals	Antimony	FS	3	0	50	50	25	0.00
9e+	Metals	Antimony	WB	January-00	January-00	50	50	25	0.00
9e+	Metals	Arsenic	FS	3	3	120	140	130	10
9e+	Metals	Arsenic	WB	January-00	January-00	130	150	140	10
9e+	Metals	Barium	FS	3	3	260	380	330	62
9e+	Metals	Barium	WB	January-00	January-00	570	740	670	88
9e+	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
9e+	Metals	Beryllium	WB	January-00	January-00	4.0	4.0	2.0	0.00
9e+	Metals	Cadmium	FS	3	3	8.7	11	9.7	1.2
9e+	Metals	Cadmium	WB	January-00	January-00	48	54	51	3.1
9e+	Metals	Chromium	FS	3	3	210	450	320	120
9e+	Metals	Chromium	WB	January-00	January-00	130	180	150	25
9e+	Metals	Cobalt	FS	3	3	49	66	58	8.5
9e+	Metals	Cobalt	WB	January-00	January-00	93	120	110	15
9e+	Metals	Copper	FS	3	3	510	560	520	32
9e+	Metals	Copper	WB	January-00	January-00	620	710	660	46
9e+	Metals	Lead	FS	3	3	19	26	23	3.5
9e+	Metals	Lead	WB	January-00	January-00	42	72	59	16
9e+	Metals	Manganese	FS	3	3	680	750	720	32
9e+	Metals	Manganese	WB	January-00	January-00	2,900	3,200	3,100	170
9e+	Metals	Mercury	FS	3	0	100	100	50	0.00
9e+	Metals	Mercury	WB	January-00	January-00	100	100	50	0.00
9e+	Metals	Nickel	FS	3	3	40	120	95	48
9e+	Metals	Nickel	WB	January-00	January-00	78	82	80	2.0
9e+	Metals	Selenium	FS	3	3	440	500	470	30
9e+	Metals	Selenium	WB	January-00	January-00	1,000	1,100	1,100	60
9e+	Metals	Silver	FS	3	0	100	100	50	0.00
9e+	Metals	Silver	WB	January-00	January-00	100	100	50	0.00
9e+	Metals	Thallium	FS	3	0	50	50	25	0.00
9e+	Metals	Thallium	WB	January-00	January-00	50	50	25	0.00
9e+	Metals	Vanadium	FS	3	2	10	24	16	9.7
9e+	Metals	Vanadium	WB	January-00	January-00	61	89	76	14
9e+	Metals	Zinc	FS	3	3	13,000	15,000	14,000	950
9e+	Metals	Zinc	WB	January-00	January-00	23,700	25,400	24,700	890
9e+	PCBs	Aroclor 1016	FS	3	0	17	19	9.2	0.58
9e+	PCBs	Aroclor 1016	WB	January-00	January-00	16	19	8.8	0.76
9e+	PCBs	Aroclor 1221	FS	3	0	17	19	9.2	0.58
9e+	PCBs	Aroclor 1221	WB	January-00	January-00	16	19	8.8	0.76
9e+	PCBs	Aroclor 1232	FS	3	0	17	19	9.2	0.58
9e+	PCBs	Aroclor 1232	WB	January-00	January-00	16	19	8.8	0.76
9e+	PCBs	Aroclor 1242	FS	3	3	12	25	19	6.5
9e+	PCBs	Aroclor 1242	WB	January-00	January-00	22	25	24	1.5
9e+	PCBs	Aroclor 1248	FS	3	0	17	19	9.2	0.58
9e+	PCBs	Aroclor 1248	WB	January-00	January-00	16	19	8.8	0.76
9e+	PCBs	Aroclor 1254	FS	3	3	65	930	360	490
9e+	PCBs	Aroclor 1254	WB	January-00	January-00	110	140	130	17
9e+	PCBs	Aroclor 1260	FS	3	3	86	170	120	47
9e+	PCBs	Aroclor 1260	WB	January-00	January-00	55	86	71	16
9e+	PCBs	PCB 77	FS	3	3	0.32	0.88	0.52	0.31
9e+	PCBs	PCB 77	WB	January-00	January-00	0.28	0.31	0.29	0.015
9e+	PCBs	PCB 105	FS	3	3	8.5	45	21	21
9e+	PCBs	PCB 105	WB	January-00	January-00	4.6	7.3	5.8	1.4
9e+	PCBs	PCB 114	FS	3	3	0.79	3.1	1.6	1.3
9e+	PCBs	PCB 114	WB	January-00	January-00	0.45	0.71	0.58	0.13

Appendix D-1: Site Summary Statistics
Mountain Whitefish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
9e+	PCBs	PCB 118	FS	3	3	15	110	49	57
9e+	PCBs	PCB 118	WB	January-00	January-00	8.7	12	11	1.7
9e+	PCBs	PCB 123	FS	3	3	0.29	1.5	0.72	0.68
9e+	PCBs	PCB 123	WB	January-00	January-00	0.20	0.25	0.22	0.027
9e+	PCBs	PCB 126	FS	3	3	0.032	0.096	0.056	0.034
9e+	PCBs	PCB 126	WB	January-00	January-00	0.010	0.016	0.013	0.0027
9e+	PCBs	PCB 156	FS	3	3	3.5	15	7.4	6.5
9e+	PCBs	PCB 156	WB	January-00	January-00	1.9	3.0	2.4	0.55
9e+	PCBs	PCB 157	FS	3	3	0.65	3.0	1.4	1.3
9e+	PCBs	PCB 157	WB	January-00	January-00	0.35	0.57	0.46	0.11
9e+	PCBs	PCB 167	FS	3	3	0.98	4.1	2.0	1.8
9e+	PCBs	PCB 167	WB	January-00	January-00	0.54	0.70	0.62	0.082
9e+	PCBs	PCB 169	FS	3	0	0.0064	0.016	0.0049	0.0026
9e+	PCBs	PCB 169	WB	January-00	January-00	0.0051	0.0052	0.0026	0.00043
9e+	PCBs	PCB 170	FS	3	3	4.3	9.8	6.2	3.1
9e+	PCBs	PCB 170	WB	January-00	January-00	2.6	3.6	3.2	0.51
9e+	PCBs	PCB 180	FS	3	3	11	20	14	4.7
9e+	PCBs	PCB 180	WB	January-00	January-00	6.1	9.7	7.6	1.9
9e+	PCBs	PCB 189	FS	3	3	0.16	0.41	0.24	0.14
9e+	PCBs	PCB 189	WB	January-00	January-00	0.093	0.13	0.11	0.019
9e+	Pesticides	Aldrin	FS	3	1	1.7	6.0	2.6	2.9
9e+	Pesticides	Aldrin	WB	January-00	January-00	1.6	1.8	1.7	0.10
9e+	Pesticides	Alpha-BHC	FS	3	0	1.7	1.9	0.92	0.058
9e+	Pesticides	Alpha-BHC	WB	January-00	January-00	1.3	1.8	1.5	0.27
9e+	Pesticides	Alpha-Chlordene	FS	3	0	1.7	1.9	0.92	0.058
9e+	Pesticides	Alpha-Chlordene	WB	January-00	January-00	1.6	1.9	0.88	0.076
9e+	Pesticides	Beta-BHC	FS	3	0	1.7	1.9	0.92	0.058
9e+	Pesticides	Beta-BHC	WB	January-00	January-00	1.6	1.9	0.88	0.076
9e+	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.7	1.9	0.92	0.058
9e+	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	January-00	January-00	1.6	1.9	0.88	0.076
9e+	Pesticides	cis-Nonachlor	FS	3	3	6.3	17	10	5.8
9e+	Pesticides	cis-Nonachlor	WB	January-00	January-00	11	17	14	3.0
9e+	Pesticides	DDD-o,p'	FS	3	3	9.9	12	11	1.2
9e+	Pesticides	DDD-o,p'	WB	January-00	January-00	17	18	17	0.58
9e+	Pesticides	DDE-o,p'	FS	3	3	11	56	27	25
9e+	Pesticides	DDE-o,p'	WB	January-00	January-00	14	19	16	2.5
9e+	Pesticides	DDT-o,p'	FS	3	0	1.7	1.9	0.92	0.058
9e+	Pesticides	DDT-o,p'	WB	January-00	January-00	1.6	1.9	0.88	0.076
9e+	Pesticides	DDD-p,p'	FS	3	3	76	96	83	11
9e+	Pesticides	DDD-p,p'	WB	January-00	January-00	93	110	99	9.5
9e+	Pesticides	DDE-p,p'	FS	3	3	600	710	650	55
9e+	Pesticides	DDE-p,p'	WB	January-00	January-00	520	740	640	110
9e+	Pesticides	DDT-p,p'	FS	3	3	4.0	13	9.3	4.7
9e+	Pesticides	DDT-p,p'	WB	January-00	January-00	2.9	6.4	4.2	1.9
9e+	Pesticides	DDMU	FS	3	3	23	40	30	8.7
9e+	Pesticides	DDMU	WB	January-00	January-00	25	31	29	3.5
9e+	Pesticides	Delta-BHC	FS	3	0	1.7	1.9	0.92	0.058
9e+	Pesticides	Delta-BHC	WB	January-00	January-00	1.6	1.9	0.88	0.076
9e+	Pesticides	Endosulfan Sulfate	FS	3	0	1.7	1.9	0.92	0.058
9e+	Pesticides	Endosulfan Sulfate	WB	January-00	January-00	1.6	1.9	0.88	0.076
9e+	Pesticides	Gamma-Chlordane	FS	3	0	1.7	1.9	0.92	0.058
9e+	Pesticides	Gamma-Chlordane	WB	January-00	January-00	1.6	1.9	0.88	0.076
9e+	Pesticides	Gamma-Chlordene	FS	3	0	1.7	1.9	0.92	0.058
9e+	Pesticides	gamma-Chlordene	WB	January-00	January-00	1.6	1.9	0.88	0.076
9e+	Pesticides	Heptachlor	FS	3	0	1.7	1.9	0.92	0.058
9e+	Pesticides	Heptachlor	WB	January-00	January-00	1.6	1.9	0.88	0.076
9e+	Pesticides	Heptachlor Epoxide	FS	3	0	1.7	1.9	0.92	0.058
9e+	Pesticides	Heptachlor Epoxide	WB	January-00	January-00	1.6	1.9	0.88	0.076
9e+	Pesticides	Hexachlorobenzene	FS	3	0	1.7	1.9	0.92	0.058
9e+	Pesticides	Hexachlorobenzene	WB	January-00	January-00	1.5	2.7	3.8	0.60
9e+	Pesticides	Lindane	FS	3	0	1.7	1.9	0.92	0.058
9e+	Pesticides	Lindane	WB	January-00	January-00	1.6	1.9	0.88	0.076
9e+	Pesticides	Mirex	FS	3	3	5.8	13	8.8	3.8
9e+	Pesticides	Mirex	WB	January-00	January-00	3.9	6.0	5.1	1.1
9e+	Pesticides	Oxychlordane	FS	3	0	1.7	1.9	0.92	0.058
9e+	Pesticides	Oxychlordane	WB	January-00	January-00	1.6	1.9	0.88	0.076
9e+	Pesticides	Pentachloroanisol	FS	3	0	1.7	1.9	0.92	0.058
9e+	Pesticides	Pentachloroanisol	WB	January-00	January-00	1.6	1.9	1.1	0.43
9e+	Pesticides	Toxaphene	FS	3	0	52	58	28	1.6
9e+	Pesticides	Toxaphene	WB	January-00	January-00	48	57	27	2.4
9e+	Pesticides	trans-Nonachlor	FS	3	2	1.7	3.7	2.1	1.5
9e+	Pesticides	trans-Nonachlor	WB	January-00	January-00	2.7	4.4	3.7	0.91
9e+	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	1,2,4-Trichlorobenzene	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	1,2-Diphenylhydrazine	WB	January-00	January-00	8.9	9.9	4.7	0.25

Appendix D-1: Site Summary Statistics
Mountain Whitefish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
9e+	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	18	20	9.6	0.32
9e+	Semivolatiles	2,4-Dinitrotoluene	WB	January-00	January-00	18	20	9.4	0.50
9e+	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	37	39	19	0.64
9e+	Semivolatiles	2,6-Dinitrotoluene	WB	January-00	January-00	36	40	19	1.0
9e+	Semivolatiles	2-Chloronaphthalene	FS	3	0	18	20	9.6	0.32
9e+	Semivolatiles	2-Chloronaphthalene	WB	January-00	January-00	18	20	9.4	0.50
9e+	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	4-Bromophenyl-Phenylether	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	4-Chlorophenyl-Phenylether	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	Acenaphthene	FS	3	0	18	20	9.6	0.32
9e+	Semivolatiles	Acenaphthene	WB	January-00	January-00	19	21	10.0	0.60
9e+	Semivolatiles	Acenaphthylene	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	Acenaphthylene	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	Anthracene	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	Anthracene	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	Benzene, 1,2-dichloro-	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	Benzene, 1,3-dichloro-	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	Benzene, 1,4-dichloro-	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	Benzo(a)anthracene	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	Benzo(a)pyrene	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	18	20	9.6	0.32
9e+	Semivolatiles	Benzo(g,h,i)perylene	WB	January-00	January-00	18	20	9.4	0.50
9e+	Semivolatiles	Benzo[b]fluoranthene	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	Benzo[b]fluoranthene	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	Benzo[k]fluoranthene	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	18	20	9.6	0.32
9e+	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	January-00	January-00	18	20	9.4	0.50
9e+	Semivolatiles	Chrysene	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	Chrysene	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	18	20	9.6	0.32
9e+	Semivolatiles	Dibenz[a,h]anthracene	WB	January-00	January-00	18	20	9.4	0.50
9e+	Semivolatiles	Dibenzofuran	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	Dibenzofuran	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	Fluoranthene	FS	3	0	18	20	9.6	0.32
9e+	Semivolatiles	Fluoranthene	WB	January-00	January-00	18	20	9.4	0.50
9e+	Semivolatiles	9H-Fluorene	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	9H-Fluorene	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	Hexachlorobutadiene	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	Hexachloroethane	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	Hexachloroethane	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	18	20	9.6	0.32
9e+	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	January-00	January-00	18	20	9.4	0.50
9e+	Semivolatiles	Naphthalene	FS	3	0	25	26	13	0.34
9e+	Semivolatiles	Naphthalene	WB	January-00	January-00	22	27	13	1.2
9e+	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	Naphthalene, 1-methyl-	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	Naphthalene, 2-methyl-	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	Nitrobenzene	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	Nitrobenzene	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	Phenanthrene	FS	3	0	9.2	9.8	4.8	0.16
9e+	Semivolatiles	Phenanthrene	WB	January-00	January-00	8.9	9.9	4.7	0.25
9e+	Semivolatiles	Pyrene	FS	3	0	18	20	9.6	0.32
9e+	Semivolatiles	Pyrene	WB	January-00	January-00	18	20	9.4	0.50
9e+	Semivolatiles	Retene	FS	3	0	18	20	9.6	0.32
9e+	Semivolatiles	Retene	WB	January-00	January-00	18	20	9.4	0.50

Appendix D-1: Site Summary Statistics
White Sturgeon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
6	Dioxin/furans	2,3,7,8-TCDD	FW	3	3	0.00023	0.00037	0.00031	0.000071
6	Dioxin/furans	1,2,3,7,8-PeCDD	FW	3	2	0.000010	0.00015	0.000083	0.000073
6	Dioxin/furans	1,2,3,4,7,8-HxCDD	FW	3	3	0.00010	0.00013	0.00012	0.000013
6	Dioxin/furans	1,2,3,6,7,8-HxCDD	FW	3	3	0.00012	0.00013	0.00012	0.0000058
6	Dioxin/furans	1,2,3,7,8,9-HxCDD	FW	3	3	0.000070	0.000085	0.000075	0.0000087
6	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FW	3	3	0.00021	0.00022	0.00021	0.0000076
6	Dioxin/furans	OCDD	FW	3	3	0.00034	0.00036	0.00035	0.000010
6	Dioxin/furans	2,3,7,8-TCDF	FW	3	3	0.0088	0.021	0.016	0.0063
6	Dioxin/furans	1,2,3,7,8-PeCDF	FW	3	3	0.00017	0.00029	0.00024	0.000064
6	Dioxin/furans	2,3,4,7,8-PeCDF	FW	3	3	0.00015	0.00021	0.00018	0.000030
6	Dioxin/furans	1,2,3,4,7,8-HxCDF	FW	3	3	0.000030	0.000050	0.000040	0.000010
6	Dioxin/furans	1,2,3,6,7,8-HxCDF	FW	3	3	0.000050	0.000070	0.000060	0.000010
6	Dioxin/furans	1,2,3,7,8,9-HxCDF	FW	3	3	0.000090	0.00011	0.000097	0.000012
6	Dioxin/furans	2,3,4,6,7,8-HxCDF	FW	3	3	0.00012	0.00015	0.00014	0.000015
6	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FW	3	3	0.000070	0.000095	0.000085	0.000013
6	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FW	3	2	0.000010	0.000030	0.000016	0.000013
6	Dioxin/furans	OCDF	FW	3	3	0.000050	0.000070	0.000060	0.000010
6	Guaiacols/Phenols	4-Chloroguaiacol	FW	3	0	470	500	240	8.8
6	Guaiacols/Phenols	3,4-Dichloroguaiacol	FW	3	0	470	500	240	8.8
6	Guaiacols/Phenols	4,5-Dichloroguaiacol	FW	3	0	470	500	240	8.8
6	Guaiacols/Phenols	4,6-Dichloroguaiacol	FW	3	0	470	500	240	8.8
6	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FW	3	0	470	500	240	8.8
6	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FW	3	0	190	200	97	3.5
6	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FW	3	0	470	500	240	8.8
6	Guaiacols/Phenols	Tetrachloroguaiacol	FW	3	0	190	200	97	3.5
6	Guaiacols/Phenols	2-Chlorophenol	FW	3	0	190	200	97	3.5
6	Guaiacols/Phenols	4-Chloro-3-methylphenol	FW	3	0	190	200	97	3.5
6	Guaiacols/Phenols	2,4-Dichlorophenol	FW	3	0	190	200	97	3.5
6	Guaiacols/Phenols	2,4-Dimethylphenol	FW	3	0	470	500	240	8.8
6	Guaiacols/Phenols	2,4,5-Trichlorophenol	FW	2	0	190	190	95	2.8
6	Guaiacols/Phenols	2,4,6-Trichlorophenol	FW	3	0	190	200	97	3.5
6	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FW	3	0	190	200	96	2.6
6	Guaiacols/Phenols	Pentachlorophenol	FW	3	0	190	200	97	3.5
6	Guaiacols/Phenols	Phenol	FW	3	0	190	200	97	3.5
6	Metals	Aluminum	FW	3	0	13,000	20,000	8,800	2,200
6	Metals	Antimony	FW	3	0	50	50	25	0.00
6	Metals	Arsenic	FW	3	3	280	340	310	30
6	Metals	Barium	FW	3	1	200	270	140	66
6	Metals	Beryllium	FW	3	0	4.0	4.0	2.0	0.00
6	Metals	Cadmium	FW	3	0	4.0	4.0	2.0	0.00
6	Metals	Chromium	FW	3	0	100	100	50	0.00
6	Metals	Cobalt	FW	3	3	1.7	6.0	4.0	2.2
6	Metals	Copper	FW	3	3	210	250	200	19
6	Metals	Lead	FW	3	2	10	29	17	12
6	Metals	Manganese	FW	3	3	260	310	290	26
6	Metals	Mercury	FW	3	3	76	180	120	55
6	Metals	Nickel	FW	3	1	30	46	23	14
6	Metals	Selenium	FW	3	3	310	440	390	68
6	Metals	Silver	FW	3	0	100	100	50	0.00
6	Metals	Thallium	FW	3	0	50	50	25	0.00
6	Metals	Vanadium	FW	3	3	15	16	14	2.3
6	Metals	Zinc	FW	3	3	3,400	4,700	4,100	650
6	PCBs	Aroclor 1016	FW	3	0	18	20	9.3	0.66
6	PCBs	Aroclor 1221	FW	3	0	18	20	9.3	0.66
6	PCBs	Aroclor 1232	FW	3	0	18	20	9.3	0.66
6	PCBs	Aroclor 1242	FW	3	0	18	20	9.3	0.66
6	PCBs	Aroclor 1248	FW	3	0	18	20	9.3	0.66
6	PCBs	Aroclor 1254	FW	3	3	40	100	62	36
6	PCBs	Aroclor 1260	FW	3	3	29	42	35	6.3
6	PCBs	PCB 77	FW	3	3	0.0041	0.021	0.015	0.0094
6	PCBs	PCB 105	FW	3	3	1.7	2.4	2.0	0.33
6	PCBs	PCB 114	FW	3	3	0.13	0.19	0.16	0.030
6	PCBs	PCB 118	FW	3	3	1.9	2.3	2.1	0.21
6	PCBs	PCB 123	FW	3	3	0.015	0.026	0.021	0.0054
6	PCBs	PCB 126	FW	3	0	0.0015	0.0021	0.00096	0.00017
6	PCBs	PCB 156	FW	3	3	0.50	0.72	0.59	0.12
6	PCBs	PCB 157	FW	3	3	0.11	0.15	0.13	0.022
6	PCBs	PCB 167	FW	3	0	0.0012	0.0083	0.0027	0.0019
6	PCBs	PCB 169	FW	3	0	0.00069	0.0014	0.00051	0.00018
6	PCBs	PCB 170	FW	3	3	0.69	1.1	0.83	0.19
6	PCBs	PCB 180	FW	3	3	2.5	3.9	3.1	0.69
6	PCBs	PCB 189	FW	3	3	0.030	0.043	0.035	0.0073
6	Pesticides	Aldrin	FW	3	0	1.8	2.0	0.93	0.066
6	Pesticides	Alpha-BHC	FW	3	0	1.8	2.0	0.93	0.066
6	Pesticides	Alpha-Chlordene	FW	3	0	1.8	2.0	0.93	0.066
6	Pesticides	Beta-BHC	FW	3	0	1.8	2.0	0.93	0.066

Appendix D-1: Site Summary Statistics
White Sturgeon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
6	Pesticides	cis-Chlordane (alpha-Chlordane)	FW	3	3	2.3	3.2	2.4	0.70
6	Pesticides	cis-Nonachlor	FW	3	3	4.0	5.4	4.8	1.0
6	Pesticides	DDD-o,p'	FW	3	3	4.2	7.0	5.4	1.4
6	Pesticides	DDE-o,p'	FW	3	3	4.3	5.6	4.9	0.66
6	Pesticides	DDT-o,p'	FW	3	3	2.5	6.0	4.0	1.8
6	Pesticides	DDD-p,p'	FW	3	3	42	52	46	5.2
6	Pesticides	DDE-p,p'	FW	3	3	330	500	400	91
6	Pesticides	DDT-p,p'	FW	3	3	1.7	4.3	2.9	1.3
6	Pesticides	DDMU	FW	3	3	4.2	12	7.5	4.0
6	Pesticides	Delta-BHC	FW	3	0	1.8	2.0	0.93	0.066
6	Pesticides	Endosulfan Sulfate	FW	3	0	1.8	2.0	0.93	0.066
6	Pesticides	Gamma-Chlordane	FW	3	3	3.3	4.0	3.6	0.36
6	Pesticides	Gamma-Chlordene	FW	3	0	1.8	2.0	0.93	0.066
6	Pesticides	Heptachlor	FW	3	0	1.8	2.0	0.93	0.066
6	Pesticides	Heptachlor Epoxide	FW	3	1	1.5	2.0	0.98	0.076
6	Pesticides	Hexachlorobenzene	FW	3	3	1.8	2.7	2.3	0.45
6	Pesticides	Lindane	FW	3	0	1.8	2.0	0.93	0.066
6	Pesticides	Mirex	FW	3	0	1.8	2.0	0.93	0.066
6	Pesticides	Oxychlordane	FW	3	0	1.8	2.0	0.94	0.052
6	Pesticides	Pentachloroanisol	FW	3	0	1.8	2.0	0.93	0.066
6	Pesticides	Toxaphene	FW	3	0	53	59	28	1.7
6	Pesticides	trans-Nonachlor	FW	3	3	5.3	7.2	6.3	0.95
6	Semivolatiles	1,2,4-Trichlorobenzene	FW	3	0	4.6	15	4.1	3.0
6	Semivolatiles	1,2-Diphenylhydrazine	FW	3	0	4.6	15	4.1	3.0
6	Semivolatiles	2,4-Dinitrotoluene	FW	3	0	9.3	30	8.2	6.0
6	Semivolatiles	2,6-Dinitrotoluene	FW	3	0	19	60	16	12
6	Semivolatiles	2-Chloronaphthalene	FW	3	0	9.3	18	6.1	2.3
6	Semivolatiles	4-Bromophenyl-Phenylether	FW	3	0	4.6	15	4.1	3.0
6	Semivolatiles	4-Chlorophenyl-Phenylether	FW	3	0	4.6	15	4.1	3.0
6	Semivolatiles	Acenaphthene	FW	3	0	9.3	30	8.2	6.0
6	Semivolatiles	Acenaphthylene	FW	3	0	4.6	15	4.1	3.0
6	Semivolatiles	Anthracene	FW	3	0	4.6	15	4.1	3.0
6	Semivolatiles	Benzene, 1,2-dichloro-	FW	3	0	4.6	15	4.1	3.0
6	Semivolatiles	Benzene, 1,3-dichloro-	FW	3	0	4.6	15	4.1	3.0
6	Semivolatiles	Benzene, 1,4-dichloro-	FW	3	0	4.6	15	4.1	3.0
6	Semivolatiles	Benzo(a)anthracene	FW	3	0	4.6	15	4.1	3.0
6	Semivolatiles	Benzo(a)pyrene	FW	3	0	4.8	23	7.2	4.6
6	Semivolatiles	Benzo(g,h,i)perylene	FW	3	0	9.7	47	14	9.2
6	Semivolatiles	Benzo[b]Fluoranthene	FW	3	0	4.8	28	9.3	6.1
6	Semivolatiles	Benzo[k]fluoranthene	FW	3	0	4.8	28	9.3	6.1
6	Semivolatiles	bis(2-Chloroisopropyl)ether	FW	3	0	9.3	30	8.2	6.0
6	Semivolatiles	Chrysene	FW	3	0	4.6	15	4.1	3.0
6	Semivolatiles	Dibenz[a,h]anthracene	FW	3	0	9.7	47	14	9.2
6	Semivolatiles	Dibenzofuran	FW	3	0	4.6	15	4.1	3.0
6	Semivolatiles	Fluoranthene	FW	3	0	9.3	30	8.2	6.0
6	Semivolatiles	9H-Fluorene	FW	3	0	4.6	15	4.1	3.0
6	Semivolatiles	Hexachlorobutadiene	FW	3	0	4.6	15	4.1	3.0
6	Semivolatiles	Hexachloroethane	FW	3	0	4.6	15	4.1	3.0
6	Semivolatiles	Indeno(1,2,3-cd)pyrene	FW	3	0	9.7	47	14	9.2
6	Semivolatiles	Naphthalene	FW	3	0	19	28	11	2.6
6	Semivolatiles	Naphthalene, 1-methyl-	FW	3	0	4.6	15	4.1	3.0
6	Semivolatiles	Naphthalene, 2-methyl-	FW	3	0	4.6	16	4.2	3.3
6	Semivolatiles	Nitrobenzene	FW	3	0	4.6	15	4.1	3.0
6	Semivolatiles	Phenanthrene	FW	3	0	4.6	17	4.4	3.5
6	Semivolatiles	Pyrene	FW	3	0	9.3	30	8.2	6.0
6	Semivolatiles	Retene	FW	3	0	9.3	30	8.2	6.0
7	Dioxin/furans	2,3,7,8-TCDD	FW	3	3	0.00013	0.00052	0.00032	0.00020
7	Dioxin/furans	1,2,3,7,8-PeCDD	FW	3	3	0.00012	0.00016	0.00014	0.000021
7	Dioxin/furans	1,2,3,4,7,8-HxCDD	FW	3	3	0.000090	0.00016	0.00013	0.000035
7	Dioxin/furans	1,2,3,6,7,8-HxCDD	FW	3	2	0.000030	0.00023	0.00011	0.000011
7	Dioxin/furans	1,2,3,7,8,9-HxCDD	FW	3	2	0.000010	0.00010	0.000062	0.000050
7	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FW	3	3	0.00017	0.00032	0.00027	0.000087
7	Dioxin/furans	OCDD	FW	3	3	0.00039	0.00055	0.00050	0.000092
7	Dioxin/furans	2,3,7,8-TCDF	FW	3	3	0.0062	0.018	0.012	0.0061
7	Dioxin/furans	1,2,3,7,8-PeCDF	FW	3	3	0.000080	0.00033	0.00020	0.00013
7	Dioxin/furans	2,3,4,7,8-PeCDF	FW	3	3	0.000060	0.00029	0.00017	0.00012
7	Dioxin/furans	1,2,3,4,7,8-HxCDF	FW	3	3	0.000020	0.000060	0.000043	0.000021
7	Dioxin/furans	1,2,3,6,7,8-HxCDF	FW	3	3	0.000040	0.000080	0.000067	0.000023
7	Dioxin/furans	1,2,3,7,8,9-HxCDF	FW	3	3	0.000070	0.00012	0.000093	0.000025
7	Dioxin/furans	2,3,4,6,7,8-HxCDF	FW	3	3	0.00013	0.00018	0.00015	0.000026
7	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FW	3	3	0.000070	0.00013	0.000097	0.000031
7	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FW	3	2	0.000010	0.000070	0.000035	0.000033
7	Dioxin/furans	OCDF	FW	3	1	0.000010	0.000080	0.000033	0.000041
7	Guaiacols/Phenols	4-Chloroguaiacol	FW	3	0	470	500	240	8.3
7	Guaiacols/Phenols	3,4-Dichloroguaiacol	FW	3	0	470	500	240	8.3
7	Guaiacols/Phenols	4,5-Dichloroguaiacol	FW	3	0	470	500	240	8.3

Appendix D-1: Site Summary Statistics
White Sturgeon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
7	Guaiacols/Phenols	4,6-Dichloroguaiacol	FW	3	0	470	500	240	8.3
7	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FW	3	0	470	500	240	8.3
7	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FW	3	0	190	200	97	3.3
7	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FW	3	0	470	500	240	8.3
7	Guaiacols/Phenols	Tetrachloroguaiacol	FW	3	0	190	200	97	3.3
7	Guaiacols/Phenols	2-Chlorophenol	FW	3	0	190	200	97	3.3
7	Guaiacols/Phenols	4-Chloro-3-methylphenol	FW	3	0	190	200	97	3.3
7	Guaiacols/Phenols	2,4-Dichlorophenol	FW	3	0	190	200	97	3.3
7	Guaiacols/Phenols	2,4-Dimethylphenol	FW	3	0	470	500	240	8.3
7	Guaiacols/Phenols	2,4,5-Trichlorophenol	FW	3	0	190	200	97	3.3
7	Guaiacols/Phenols	2,4,6-Trichlorophenol	FW	3	0	190	200	97	3.3
7	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FW	3	0	190	200	97	3.3
7	Guaiacols/Phenols	Pentachlorophenol	FW	3	0	190	200	97	3.3
7	Guaiacols/Phenols	Phenol	FW	3	0	190	200	97	3.3
7	Metals	Aluminum	FW	3	0	5,000	20,000	7,500	4,300
7	Metals	Antimony	FW	3	0	50	50	25	0.00
7	Metals	Arsenic	FW	3	3	180	640	340	260
7	Metals	Barium	FW	3	1	200	630	280	310
7	Metals	Beryllium	FW	3	0	4.0	4.0	2.0	0.00
7	Metals	Cadmium	FW	3	0	4.0	4.0	2.0	0.00
7	Metals	Chromium	FW	3	0	100	100	50	0.00
7	Metals	Cobalt	FW	3	2	1.0	8.9	5.3	4.3
7	Metals	Copper	FW	3	3	230	370	280	78
7	Metals	Lead	FW	3	1	10	10	6.7	2.9
7	Metals	Manganese	FW	3	3	250	310	280	32
7	Metals	Mercury	FW	3	1	43	290	110	150
7	Metals	Nickel	FW	3	1	30	32	21	9.8
7	Metals	Selenium	FW	3	3	580	1,500	1,200	520
7	Metals	Silver	FW	3	0	100	100	50	0.00
7	Metals	Thallium	FW	3	0	50	50	25	0.00
7	Metals	Vanadium	FW	3	1	10	20	9.0	3.6
7	Metals	Zinc	FW	3	3	3,200	4,300	3,900	590
7	PCBs	Aroclor 1016	FW	3	0	18	20	9.5	0.50
7	PCBs	Aroclor 1221	FW	3	0	18	20	9.5	0.50
7	PCBs	Aroclor 1232	FW	3	0	18	20	9.5	0.50
7	PCBs	Aroclor 1242	FW	3	0	18	20	9.5	0.50
7	PCBs	Aroclor 1248	FW	3	0	18	20	9.5	0.50
7	PCBs	Aroclor 1254	FW	3	0	10	56	30	24
7	PCBs	Aroclor 1260	FW	3	3	13	39	29	14
7	PCBs	PCB 77	FW	3	3	0.0011	0.019	0.0088	0.0091
7	PCBs	PCB 105	FW	3	3	0.35	2.2	1.1	0.92
7	PCBs	PCB 114	FW	3	3	0.028	0.18	0.095	0.077
7	PCBs	PCB 118	FW	3	3	0.27	2.7	1.3	1.3
7	PCBs	PCB 123	FW	3	3	0.0044	0.027	0.014	0.012
7	PCBs	PCB 126	FW	3	1	0.00074	0.0026	0.0012	0.0012
7	PCBs	PCB 156	FW	3	3	0.13	0.55	0.36	0.21
7	PCBs	PCB 157	FW	3	3	0.023	0.12	0.071	0.050
7	PCBs	PCB 167	FW	3	1	0.0025	0.021	0.0085	0.011
7	PCBs	PCB 169	FW	3	0	0.00050	0.0020	0.00050	0.00043
7	PCBs	PCB 170	FW	3	3	0.36	0.90	0.71	0.30
7	PCBs	PCB 180	FW	3	3	1.2	2.9	2.3	0.96
7	PCBs	PCB 189	FW	3	3	0.015	0.034	0.027	0.011
7	Pesticides	Aldrin	FW	3	0	1.8	2.0	0.95	0.050
7	Pesticides	Alpha-BHC	FW	3	0	1.8	2.0	0.95	0.050
7	Pesticides	Alpha-Chlordane	FW	3	0	1.8	2.0	0.95	0.050
7	Pesticides	Beta-BHC	FW	3	0	1.8	2.0	0.95	0.050
7	Pesticides	cis-Chlordane (alpha-Chlordane)	FW	3	1	1.9	8.0	3.3	4.1
7	Pesticides	cis-Nonachlor	FW	3	2	2.0	8.0	4.3	3.5
7	Pesticides	DDD-o,p'	FW	3	3	2.2	13	7.4	5.4
7	Pesticides	DDE-o,p'	FW	3	2	2.0	5.7	3.1	2.4
7	Pesticides	DDT-o,p'	FW	3	2	2.0	5.3	2.9	2.2
7	Pesticides	DDD-p,p'	FW	3	3	16	74	45	29
7	Pesticides	DDE-p,p'	FW	3	3	100	570	310	240
7	Pesticides	DDT-p,p'	FW	3	2	2.0	4.2	2.8	1.7
7	Pesticides	DDMU	FW	3	3	2.0	9.3	5.3	3.7
7	Pesticides	Delta-BHC	FW	3	0	1.8	2.0	0.95	0.050
7	Pesticides	Endosulfan Sulfate	FW	3	0	1.8	2.0	0.95	0.050
7	Pesticides	Gamma-Chlordane	FW	3	2	2.0	8.1	3.8	3.8
7	Pesticides	Gamma-Chlordene	FW	3	0	1.8	2.0	0.95	0.050
7	Pesticides	Heptachlor	FW	3	0	1.8	2.0	0.95	0.050
7	Pesticides	Heptachlor Epoxide	FW	3	0	1.8	2.0	0.95	0.050
7	Pesticides	Hexachlorobenzene	FW	3	3	1.8	5.7	3.9	2.0
7	Pesticides	Lindane	FW	3	0	1.8	2.0	0.95	0.050
7	Pesticides	Mirex	FW	3	0	1.8	2.0	0.95	0.050
7	Pesticides	Oxychlordane	FW	3	0	1.8	2.0	0.95	0.050
7	Pesticides	Pentachloroanisole	FW	3	0	1.8	2.0	0.95	0.050

Appendix D-1: Site Summary Statistics
White Sturgeon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
7	Pesticides	Toxaphene	FW	3	0	53	59	28	1.5
7	Pesticides	trans-Nonachlor	FW	3	2	2.0	9.6	4.7	4.4
7	Semivolatiles	1,2,4-Trichlorobenzene	FW	3	0	4.7	5.0	2.4	0.076
7	Semivolatiles	1,2-Diphenylhydrazine	FW	3	0	4.7	5.0	2.4	0.076
7	Semivolatiles	2,4-Dinitrotoluene	FW	3	0	9.4	10	4.8	0.16
7	Semivolatiles	2,6-Dinitrotoluene	FW	3	0	19	20	9.7	0.33
7	Semivolatiles	2-Chloronaphthalene	FW	3	0	9.4	10	4.8	0.16
7	Semivolatiles	4-Bromophenyl-Phenylether	FW	3	0	4.7	5.0	2.4	0.076
7	Semivolatiles	4-Chlorophenyl-Phenylether	FW	3	0	4.7	5.0	2.4	0.076
7	Semivolatiles	Acenaphthene	FW	3	0	9.4	10	4.8	0.16
7	Semivolatiles	Acenaphthylene	FW	3	0	4.7	5.0	2.4	0.076
7	Semivolatiles	Anthracene	FW	3	0	4.7	5.0	2.4	0.076
7	Semivolatiles	Benzene, 1,2-dichloro-	FW	3	0	4.7	5.0	2.4	0.076
7	Semivolatiles	Benzene, 1,3-dichloro-	FW	3	0	4.7	5.0	2.4	0.076
7	Semivolatiles	Benzene, 1,4-dichloro-	FW	3	0	4.7	5.0	2.4	0.076
7	Semivolatiles	Benzo(a)anthracene	FW	3	0	4.7	25	5.8	5.9
7	Semivolatiles	Benzo(a)pyrene	FW	3	0	4.7	25	5.8	5.9
7	Semivolatiles	Benzo(g,h,i)perylene	FW	3	0	9.4	50	12	12
7	Semivolatiles	Benzo(b)fluoranthene	FW	3	0	4.7	25	5.8	5.9
7	Semivolatiles	Benzo(k)fluoranthene	FW	3	0	4.7	25	5.8	5.9
7	Semivolatiles	bis(2-Chloroisopropyl)ether	FW	3	0	9.4	10	4.8	0.16
7	Semivolatiles	Chrysene	FW	3	0	4.7	25	5.8	5.9
7	Semivolatiles	Dibenz[a,h]anthracene	FW	3	0	9.4	50	12	12
7	Semivolatiles	Dibenzofuran	FW	3	0	4.7	5.0	2.4	0.076
7	Semivolatiles	Fluoranthene	FW	3	0	9.4	10	4.8	0.16
7	Semivolatiles	9H-Fluorene	FW	3	0	4.7	5.0	2.4	0.076
7	Semivolatiles	Hexachlorobutadiene	FW	3	0	4.7	5.0	2.4	0.076
7	Semivolatiles	Hexachloroethane	FW	3	0	4.7	5.0	2.4	0.076
7	Semivolatiles	Indeno(1,2,3-cd)pyrene	FW	3	0	9.4	50	12	12
7	Semivolatiles	Naphthalene	FW	3	0	26	27	13	0.48
7	Semivolatiles	Naphthalene, 1-methyl-	FW	3	0	4.7	5.0	2.4	0.076
7	Semivolatiles	Naphthalene, 2-methyl-	FW	3	0	4.8	7.0	3.1	0.64
7	Semivolatiles	Nitrobenzene	FW	3	0	4.7	5.0	2.4	0.076
7	Semivolatiles	Phenanthrene	FW	3	0	4.8	7.3	2.8	0.72
7	Semivolatiles	Pyrene	FW	3	0	9.4	50	12	12
7	Semivolatiles	Retene	FW	3	0	9.4	50	12	12
8	Dioxin/furans	2,3,7,8-TCDD	FW	3	3	0.00028	0.00052	0.00043	0.00013
8	Dioxin/furans	2,3,7,8-TCDD	WB	3	3	0.00045	0.00089	0.00061	0.00024
8	Dioxin/furans	1,2,3,7,8-PeCDD	FW	3	3	0.00013	0.00018	0.00015	0.000025
8	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	1	0.000010	0.00017	0.000060	0.000095
8	Dioxin/furans	1,2,3,4,7,8-HxCDD	FW	3	3	0.00011	0.00015	0.00013	0.000021
8	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	2	0.000010	0.00013	0.000085	0.000069
8	Dioxin/furans	1,2,3,6,7,8-HxCDD	FW	3	2	0.000080	0.00026	0.00015	0.00011
8	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000020	0.00025	0.00017	0.00014
8	Dioxin/furans	1,2,3,7,8,9-HxCDD	FW	3	2	0.000050	0.000080	0.000050	0.000010
8	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000020	0.000070	0.000043	0.000031
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FW	3	3	0.00036	0.00045	0.00041	0.000045
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00034	0.00049	0.00043	0.000078
8	Dioxin/furans	OCDD	FW	3	3	0.00053	0.00070	0.00059	0.000095
8	Dioxin/furans	OCDD	WB	3	3	0.00060	0.0013	0.00085	0.00036
8	Dioxin/furans	2,3,7,8-TCDF	FW	3	3	0.011	0.020	0.016	0.0044
8	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.016	0.021	0.018	0.0026
8	Dioxin/furans	1,2,3,7,8-PeCDF	FW	3	3	0.00016	0.00029	0.00024	0.000072
8	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.00029	0.00036	0.00033	0.000035
8	Dioxin/furans	2,3,4,7,8-PeCDF	FW	3	3	0.00013	0.00026	0.00021	0.000072
8	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00025	0.00035	0.00029	0.000055
8	Dioxin/furans	1,2,3,4,7,8-HxCDF	FW	3	2	0.000030	0.000050	0.000035	0.000013
8	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	3	0.000040	0.000060	0.000050	0.000010
8	Dioxin/furans	1,2,3,6,7,8-HxCDF	FW	3	2	0.000050	0.000090	0.000058	0.000033
8	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	2	0.000020	0.00010	0.000060	0.000046
8	Dioxin/furans	1,2,3,7,8,9-HxCDF	FW	3	1	0.000010	0.000060	0.000030	0.000028
8	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	3	0.000050	0.000070	0.000060	0.000010
8	Dioxin/furans	2,3,4,6,7,8-HxCDF	FW	3	3	0.00014	0.00017	0.00015	0.000015
8	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	2	0.000020	0.00019	0.00013	0.000010
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FW	3	3	0.000090	0.00013	0.00011	0.000021
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000030	0.00017	0.00011	0.000080
8	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FW	3	0	0.000020	0.000060	0.000017	0.000012
8	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	1	0.000030	0.000050	0.000027	0.000020
8	Dioxin/furans	OCDF	FW	3	2	0.000040	0.000060	0.000040	0.000020
8	Dioxin/furans	OCDF	WB	3	1	0.000010	0.00018	0.000065	0.000100
8	Guaiacols/Phenols	4-Chloroguaiacol	FW	3	0	480	500	240	4.5
8	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	500	1,000	410	140
8	Guaiacols/Phenols	3,4-Dichloroguaiacol	FW	3	0	480	500	240	4.5
8	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	500	1,000	410	140
8	Guaiacols/Phenols	4,5-Dichloroguaiacol	FW	3	0	480	500	240	4.5
8	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	500	1,000	410	140

Appendix D-1: Site Summary Statistics
White Sturgeon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Guaiacols/Phenols	4,6-Dichloroguaiacol	FW	3	0	480	500	240	4.5
8	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	500	1,000	410	140
8	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FW	3	0	480	500	240	4.5
8	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	500	1,000	410	140
8	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FW	3	0	190	200	98	1.8
8	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	200	400	170	57
8	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FW	3	0	480	500	240	4.5
8	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	500	1,000	410	140
8	Guaiacols/Phenols	Tetrachloroguaiacol	FW	3	0	190	200	98	1.8
8	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	200	400	170	57
8	Guaiacols/Phenols	2-Chlorophenol	FW	3	0	190	200	98	1.8
8	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	200	400	170	57
8	Guaiacols/Phenols	4-Chloro-3-methylphenol	FW	3	0	190	200	98	1.8
8	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	200	400	170	57
8	Guaiacols/Phenols	2,4-Dichlorophenol	FW	3	0	190	200	98	1.8
8	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	200	400	170	57
8	Guaiacols/Phenols	2,4-Dimethylphenol	FW	3	0	480	500	240	4.5
8	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	500	1,000	410	140
8	Guaiacols/Phenols	2,4,5-Trichlorophenol	FW	3	0	190	200	98	1.8
8	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	200	400	170	57
8	Guaiacols/Phenols	2,4,6-Trichlorophenol	FW	3	0	190	200	98	1.8
8	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	200	400	170	57
8	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FW	3	0	190	200	98	1.8
8	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	200	400	170	57
8	Guaiacols/Phenols	Pentachlorophenol	FW	3	0	190	200	98	1.8
8	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	200	400	170	57
8	Guaiacols/Phenols	Phenol	FW	3	0	190	200	98	1.8
8	Guaiacols/Phenols	Phenol	WB	3	1	400	530	310	190
8	Metals	Aluminum	FW	3	0	5,000	5,000	2,500	0.00
8	Metals	Aluminum	WB	3	3	3,400	180,000	71,000	99,000
8	Metals	Antimony	FW	3	0	50	50	25	0.00
8	Metals	Antimony	WB	3	0	50	500	100	130
8	Metals	Arsenic	FW	3	3	270	480	340	120
8	Metals	Arsenic	WB	3	2	500	660	500	220
8	Metals	Barium	FW	3	3	270	480	390	110
8	Metals	Barium	WB	3	3	1,100	2,700	1,900	780
8	Metals	Beryllium	FW	3	0	4.0	4.0	2.0	0.00
8	Metals	Beryllium	WB	3	2	8.0	60	16	12
8	Metals	Cadmium	FW	3	0	4.0	4.0	2.0	0.00
8	Metals	Cadmium	WB	3	3	21	95	47	42
8	Metals	Chromium	FW	3	0	100	100	50	0.00
8	Metals	Chromium	WB	3	2	140	1,000	300	180
8	Metals	Cobalt	FW	3	3	4.2	7.6	6.4	1.9
8	Metals	Cobalt	WB	3	3	100	420	280	160
8	Metals	Copper	FW	3	1	270	410	230	160
8	Metals	Copper	WB	3	3	760	1,500	1,000	430
8	Metals	Lead	FW	3	0	10	10	5.0	0.00
8	Metals	Lead	WB	3	3	100	330	180	130
8	Metals	Manganese	FW	3	3	240	270	250	13
8	Metals	Manganese	WB	3	3	1,000	6,700	3,000	3,200
8	Metals	Mercury	FW	3	2	38	82	51	32
8	Metals	Mercury	WB	3	3	73	250	170	88
8	Metals	Nickel	FW	3	3	54	64	58	5.3
8	Metals	Nickel	WB	3	3	57	330	150	150
8	Metals	Selenium	FW	3	3	1,100	1,900	1,300	460
8	Metals	Selenium	WB	3	2	420	1,000	510	100
8	Metals	Silver	FW	3	0	100	100	50	0.00
8	Metals	Silver	WB	3	0	200	2,000	400	520
8	Metals	Thallium	FW	3	0	50	50	25	0.00
8	Metals	Thallium	WB	3	0	50	500	100	130
8	Metals	Vanadium	FW	3	0	20	20	10	0.00
8	Metals	Vanadium	WB	3	3	58	670	280	340
8	Metals	Zinc	FW	3	3	2,900	3,000	2,900	74
8	Metals	Zinc	WB	3	3	8,900	9,600	9,100	420
8	PCBs	Aroclor 1016	FW	3	0	18	19	9.3	0.29
8	PCBs	Aroclor 1016	WB	3	0	19	20	9.8	0.29
8	PCBs	Aroclor 1221	FW	3	0	18	19	9.3	0.29
8	PCBs	Aroclor 1221	WB	3	0	19	20	9.8	0.29
8	PCBs	Aroclor 1232	FW	3	0	18	19	9.3	0.29
8	PCBs	Aroclor 1232	WB	3	0	19	20	9.8	0.29
8	PCBs	Aroclor 1242	FW	3	0	18	19	9.3	0.29
8	PCBs	Aroclor 1242	WB	3	0	19	20	9.8	0.29
8	PCBs	Aroclor 1248	FW	3	0	18	19	9.3	0.29
8	PCBs	Aroclor 1248	WB	3	0	19	20	9.8	0.29
8	PCBs	Aroclor 1254	FW	3	3	26	36	30	5.3
8	PCBs	Aroclor 1254	WB	3	3	38	120	82	41

Appendix D-1: Site Summary Statistics
White Sturgeon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	PCBs	Aroclor 1260	FW	3	3	31	46	40	7.8
8	PCBs	Aroclor 1260	WB	3	3	53	160	120	57
8	PCBs	PCB 77	FW	3	3	0.0040	0.0093	0.0066	0.0026
8	PCBs	PCB 77	WB	3	3	0.0082	0.016	0.011	0.0044
8	PCBs	PCB 105	FW	3	3	0.94	1.6	1.2	0.37
8	PCBs	PCB 105	WB	3	3	2.0	5.6	4.4	2.1
8	PCBs	PCB 114	FW	3	3	0.071	0.14	0.10	0.037
8	PCBs	PCB 114	WB	3	3	0.16	0.47	0.35	0.17
8	PCBs	PCB 118	FW	3	3	0.97	1.3	1.1	0.21
8	PCBs	PCB 118	WB	3	3	2.2	7.2	5.2	2.6
8	PCBs	PCB 123	FW	3	3	0.010	0.021	0.015	0.0056
8	PCBs	PCB 123	WB	3	3	0.015	0.039	0.029	0.012
8	PCBs	PCB 126	FW	3	0	0.0016	0.0027	0.0010	0.00029
8	PCBs	PCB 126	WB	3	0	0.00050	0.0042	0.0012	0.00092
8	PCBs	PCB 156	FW	3	3	0.34	0.60	0.45	0.13
8	PCBs	PCB 156	WB	3	3	0.77	2.2	1.7	0.81
8	PCBs	PCB 157	FW	3	3	0.061	0.11	0.082	0.028
8	PCBs	PCB 157	WB	3	3	0.15	0.40	0.31	0.14
8	PCBs	PCB 167	FW	3	2	0.0053	0.019	0.011	0.0085
8	PCBs	PCB 167	WB	3	3	0.015	0.13	0.060	0.062
8	PCBs	PCB 169	FW	3	0	0.00053	0.00055	0.00027	0.000058
8	PCBs	PCB 169	WB	3	1	0.0017	0.0047	0.0020	0.00034
8	PCBs	PCB 170	FW	3	3	0.80	1.4	1.1	0.32
8	PCBs	PCB 170	WB	3	3	1.5	4.4	3.4	1.6
8	PCBs	PCB 180	FW	3	3	2.4	4.1	3.2	0.81
8	PCBs	PCB 180	WB	3	3	4.8	16	12	5.9
8	PCBs	PCB 189	FW	3	3	0.032	0.053	0.040	0.011
8	PCBs	PCB 189	WB	3	3	0.060	0.16	0.13	0.059
8	Pesticides	Aldrin	FW	3	0	1.8	1.9	0.93	0.029
8	Pesticides	Aldrin	WB	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Alpha-BHC	FW	3	0	1.8	1.9	0.93	0.029
8	Pesticides	Alpha-BHC	WB	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Alpha-Chlordane	FW	3	0	1.8	1.9	0.93	0.029
8	Pesticides	Alpha-Chlordane	WB	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Beta-BHC	FW	3	0	1.8	1.9	0.93	0.029
8	Pesticides	Beta-BHC	WB	3	0	1.9	2.0	0.98	0.029
8	Pesticides	cis-Chlordane (alpha-Chlordane)	FW	3	0	1.8	1.9	0.93	0.029
8	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	2	2.0	3.6	2.7	1.5
8	Pesticides	cis-Nonachlor	FW	3	2	1.8	6.2	3.7	2.7
8	Pesticides	cis-Nonachlor	WB	3	3	5.1	8.1	6.9	1.6
8	Pesticides	DDD-o,p'	FW	3	3	3.4	12	8.0	4.3
8	Pesticides	DDD-o,p'	WB	3	3	4.9	7.7	6.6	1.5
8	Pesticides	DDE-o,p'	FW	3	3	3.0	4.5	3.7	0.76
8	Pesticides	DDE-o,p'	WB	3	3	5.2	12	8.9	3.4
8	Pesticides	DDT-o,p'	FW	3	2	1.8	4.2	2.5	1.7
8	Pesticides	DDT-o,p'	WB	3	2	2.0	6.3	3.5	2.7
8	Pesticides	DDD-p,p'	FW	3	3	25	63	45	19
8	Pesticides	DDD-p,p'	WB	3	3	78	140	100	32
8	Pesticides	DDE-p,p'	FW	3	3	250	450	340	100
8	Pesticides	DDE-p,p'	WB	3	3	400	1,100	750	350
8	Pesticides	DDT-p,p'	FW	3	3	1.9	5.3	3.7	1.7
8	Pesticides	DDT-p,p'	WB	3	3	16	38	25	11
8	Pesticides	DDMU	FW	3	3	4.0	6.4	5.3	1.2
8	Pesticides	DDMU	WB	3	1	1.9	11	4.3	5.8
8	Pesticides	Delta-BHC	FW	3	0	1.8	1.9	0.93	0.029
8	Pesticides	Delta-BHC	WB	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Endosulfan Sulfate	FW	3	0	1.8	1.9	0.93	0.029
8	Pesticides	Endosulfan Sulfate	WB	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Gamma-Chlordane	FW	3	2	1.8	3.9	2.5	1.5
8	Pesticides	Gamma-Chlordane	WB	3	3	1.9	10	5.7	4.1
8	Pesticides	Gamma-Chlordene	FW	3	0	1.8	1.9	0.93	0.029
8	Pesticides	Gamma-Chlordene	WB	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Heptachlor	FW	3	0	1.8	1.9	0.93	0.029
8	Pesticides	Heptachlor	WB	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Heptachlor Epoxide	FW	3	0	1.8	1.9	0.93	0.029
8	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Hexachlorobenzene	FW	3	3	2.9	7.1	5.6	2.3
8	Pesticides	Hexachlorobenzene	WB	3	3	5.7	6.9	6.1	0.69
8	Pesticides	Lindane	FW	3	0	1.8	1.9	0.93	0.029
8	Pesticides	Lindane	WB	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Mirex	FW	3	0	1.8	1.9	0.93	0.029
8	Pesticides	Mirex	WB	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Oxychlordane	FW	3	0	1.8	1.9	0.93	0.029
8	Pesticides	Oxychlordane	WB	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Pentachloroanisol	FW	3	0	1.8	1.9	0.93	0.029
8	Pesticides	Pentachloroanisol	WB	3	0	1.9	2.0	0.98	0.029

Appendix D-1: Site Summary Statistics
White Sturgeon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Pesticides	Toxaphene	FW	3	0	55	58	28	0.76
8	Pesticides	Toxaphene	WB	3	0	57	60	29	0.76
8	Pesticides	trans-Nonachlor	FW	3	3	3.5	6.0	4.4	1.4
8	Pesticides	trans-Nonachlor	WB	3	1	1.9	18	6.7	9.8
8	Semivolatiles	1,2,4-Trichlorobenzene	FW	3	0	4.8	4.9	2.4	0.029
8	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	4.6	46	13	10
8	Semivolatiles	1,2-Diphenylhydrazine	FW	3	0	4.8	4.9	2.4	0.029
8	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	4.6	46	13	10
8	Semivolatiles	2,4-Dinitrotoluene	FW	3	0	9.6	9.9	4.9	0.076
8	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	9.2	92	25	21
8	Semivolatiles	2,6-Dinitrotoluene	FW	3	0	19	20	9.8	0.18
8	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	18	180	50	41
8	Semivolatiles	2-Chloronaphthalene	FW	3	0	9.6	9.9	4.9	0.076
8	Semivolatiles	2-Chloronaphthalene	WB	3	0	9.2	92	25	21
8	Semivolatiles	4-Bromophenyl-Phenylether	FW	3	0	4.8	4.9	2.4	0.029
8	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	4.6	46	13	10
8	Semivolatiles	4-Chlorophenyl-Phenylether	FW	3	0	4.8	4.9	2.4	0.029
8	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	4.6	46	13	10
8	Semivolatiles	Acenaphthene	FW	3	0	9.6	9.9	4.9	0.076
8	Semivolatiles	Acenaphthene	WB	3	0	9.2	92	25	21
8	Semivolatiles	Acenaphthylene	FW	3	0	4.8	4.9	2.4	0.029
8	Semivolatiles	Acenaphthylene	WB	3	0	4.6	46	13	10
8	Semivolatiles	Anthracene	FW	3	0	4.8	4.9	2.4	0.029
8	Semivolatiles	Anthracene	WB	3	0	4.6	46	13	10
8	Semivolatiles	Benzene, 1,2-dichloro-	FW	3	0	4.8	4.9	2.4	0.029
8	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	4.6	46	13	10
8	Semivolatiles	Benzene, 1,3-dichloro-	FW	3	0	4.8	4.9	2.4	0.029
8	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	4.6	46	13	10
8	Semivolatiles	Benzene, 1,4-dichloro-	FW	3	0	4.8	4.9	2.4	0.029
8	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	4.6	46	13	10
8	Semivolatiles	Benzo(a)anthracene	FW	3	0	4.8	4.9	2.4	0.029
8	Semivolatiles	Benzo(a)anthracene	WB	3	0	4.6	46	13	10
8	Semivolatiles	Benzo(a)pyrene	FW	3	0	4.8	4.9	2.4	0.029
8	Semivolatiles	Benzo(a)pyrene	WB	3	0	4.6	46	13	10
8	Semivolatiles	Benzo(g,h,i)perylene	FW	3	0	9.6	9.9	4.9	0.076
8	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	9.2	92	25	21
8	Semivolatiles	Benzo[b]fluoranthene	FW	3	0	4.8	4.9	2.4	0.029
8	Semivolatiles	Benzo[b]fluoranthene	WB	3	0	4.6	46	13	10
8	Semivolatiles	Benzo[k]fluoranthene	FW	3	0	4.8	4.9	2.4	0.029
8	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	4.6	46	13	10
8	Semivolatiles	bis(2-Chloroisopropyl)ether	FW	3	0	9.6	9.9	4.9	0.076
8	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	9.2	92	25	21
8	Semivolatiles	Chrysene	FW	3	0	4.8	4.9	2.4	0.029
8	Semivolatiles	Chrysene	WB	3	0	4.6	46	13	10
8	Semivolatiles	Dibenz[a,h]anthracene	FW	3	0	9.6	9.9	4.9	0.076
8	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	9.2	92	25	21
8	Semivolatiles	Dibenzofuran	FW	3	0	4.8	4.9	2.4	0.029
8	Semivolatiles	Dibenzofuran	WB	3	0	4.6	46	13	10
8	Semivolatiles	Fluoranthene	FW	3	0	9.6	9.9	4.9	0.076
8	Semivolatiles	Fluoranthene	WB	3	0	9.2	92	25	21
8	Semivolatiles	9H-Fluorene	FW	3	0	4.8	4.9	2.4	0.029
8	Semivolatiles	9H-Fluorene	WB	3	0	4.6	46	13	10
8	Semivolatiles	Hexachlorobutadiene	FW	3	0	4.8	4.9	2.4	0.029
8	Semivolatiles	Hexachlorobutadiene	WB	3	0	4.6	46	13	10
8	Semivolatiles	Hexachloroethane	FW	3	0	4.8	4.9	2.4	0.029
8	Semivolatiles	Hexachloroethane	WB	3	0	4.6	46	13	10
8	Semivolatiles	Indeno(1,2,3-cd)pyrene	FW	3	0	9.6	9.9	4.9	0.076
8	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	9.2	92	25	21
8	Semivolatiles	Naphthalene	FW	3	0	19	60	17	11
8	Semivolatiles	Naphthalene	WB	3	0	25	46	16	5.7
8	Semivolatiles	Naphthalene, 1-methyl-	FW	3	1	4.8	10	5.1	4.5
8	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	4.8	46	13	10
8	Semivolatiles	Naphthalene, 2-methyl-	FW	3	1	4.8	25	10	13
8	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	10	46	14	9.0
8	Semivolatiles	Nitrobenzene	FW	3	0	4.8	4.9	2.4	0.029
8	Semivolatiles	Nitrobenzene	WB	3	0	4.6	46	13	10
8	Semivolatiles	Phenanthrene	FW	3	0	4.8	7.7	2.9	0.82
8	Semivolatiles	Phenanthrene	WB	3	0	4.6	46	13	10
8	Semivolatiles	Pyrene	FW	3	0	9.6	9.9	4.9	0.076
8	Semivolatiles	Pyrene	WB	3	0	9.2	92	25	21
8	Semivolatiles	Retene	FW	3	0	9.6	9.9	4.9	0.076
8	Semivolatiles	Retene	WB	3	0	9.2	92	25	21
13	Dioxin/furans	2,3,7,8-TCDD	FW	3	3	0.000095	0.00063	0.00035	0.00027
13	Dioxin/furans	1,2,3,7,8-PeCDD	FW	3	3	0.000080	0.00015	0.00011	0.000039
13	Dioxin/furans	1,2,3,4,7,8-HxCDD	FW	3	1	0.000020	0.00013	0.000048	0.000066
13	Dioxin/furans	1,2,3,6,7,8-HxCDD	FW	3	3	0.000070	0.00031	0.00021	0.00012

Appendix D-1: Site Summary Statistics
White Sturgeon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
13	Dioxin/furans	1,2,3,7,8,9-HxCDD	FW	3	2	0.000020	0.000060	0.000033	0.000025
13	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FW	3	3	0.00015	0.00041	0.00028	0.00013
13	Dioxin/furans	OCDD	FW	3	3	0.00043	0.00091	0.00061	0.00026
13	Dioxin/furans	2,3,7,8-TCDF	FW	3	3	0.0025	0.0050	0.0042	0.0014
13	Dioxin/furans	1,2,3,7,8-PeCDF	FW	3	3	0.00013	0.00018	0.00015	0.000029
13	Dioxin/furans	2,3,4,7,8-PeCDF	FW	3	1	0.000015	0.00015	0.000059	0.000079
13	Dioxin/furans	1,2,3,4,7,8-HxCDF	FW	3	3	0.000035	0.000080	0.000062	0.000024
13	Dioxin/furans	1,2,3,6,7,8-HxCDF	FW	3	3	0.000050	0.000070	0.000062	0.000010
13	Dioxin/furans	1,2,3,7,8,9-HxCDF	FW	3	1	0.000020	0.000035	0.000018	0.000013
13	Dioxin/furans	2,3,4,6,7,8-HxCDF	FW	3	2	0.000020	0.00016	0.000065	0.000079
13	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FW	3	3	0.000080	0.00013	0.00011	0.000025
13	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FW	3	0	0.000020	0.000020	0.000010	0.00
13	Dioxin/furans	OCDF	FW	3	1	0.000010	0.000030	0.000013	0.000013
13	Guaiacols/Phenols	4-Chloroguaiacol	FW	3	0	740	920	420	48
13	Guaiacols/Phenols	3,4-Dichloroguaiacol	FW	3	0	740	920	420	48
13	Guaiacols/Phenols	4,5-Dichloroguaiacol	FW	3	0	740	920	420	48
13	Guaiacols/Phenols	4,6-Dichloroguaiacol	FW	3	0	740	920	420	48
13	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FW	3	0	740	920	420	48
13	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FW	3	0	290	370	170	19
13	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FW	3	0	740	920	420	48
13	Guaiacols/Phenols	Tetrachloroguaiacol	FW	3	0	290	370	170	19
13	Guaiacols/Phenols	2-Chlorophenol	FW	3	0	290	370	170	19
13	Guaiacols/Phenols	4-Chloro-3-methylphenol	FW	3	0	290	370	170	19
13	Guaiacols/Phenols	2,4-Dichlorophenol	FW	3	0	290	370	170	19
13	Guaiacols/Phenols	2,4-Dimethylphenol	FW	3	0	740	920	420	48
13	Guaiacols/Phenols	2,4,5-Trichlorophenol	FW	3	0	290	350	160	15
13	Guaiacols/Phenols	2,4,6-Trichlorophenol	FW	3	0	290	350	160	15
13	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FW	3	0	290	370	170	19
13	Guaiacols/Phenols	Pentachlorophenol	FW	3	0	290	370	170	19
13	Guaiacols/Phenols	Phenol	FW	3	0	290	370	170	19
13	Metals	Aluminum	FW	3	0	1,000	1,000	500	0.00
13	Metals	Antimony	FW	3	0	50	50	25	0.00
13	Metals	Arsenic	FW	3	3	150	240	200	49
13	Metals	Barium	FW	3	1	200	290	160	110
13	Metals	Beryllium	FW	3	1	4.0	7.4	3.3	2.3
13	Metals	Cadmium	FW	3	1	4.0	5.5	2.8	1.4
13	Metals	Chromium	FW	3	0	100	100	50	0.00
13	Metals	Cobalt	FW	3	3	3.7	56	28	26
13	Metals	Copper	FW	3	3	240	390	300	79
13	Metals	Lead	FW	3	0	10	10	5.0	0.00
13	Metals	Manganese	FW	3	3	210	370	270	86
13	Metals	Mercury	FW	3	3	100	430	310	180
13	Metals	Nickel	FW	3	3	32	290	170	130
13	Metals	Selenium	FW	3	3	430	1,000	700	300
13	Metals	Silver	FW	3	0	100	200	67	29
13	Metals	Thallium	FW	3	0	50	50	25	0.00
13	Metals	Vanadium	FW	3	1	10	10	5.8	1.4
13	Metals	Zinc	FW	3	3	4,200	4,900	4,600	400
13	PCBs	Aroclor 1016	FW	3	0	19	20	9.7	0.29
13	PCBs	Aroclor 1221	FW	3	0	19	20	9.7	0.29
13	PCBs	Aroclor 1232	FW	3	0	19	20	9.7	0.29
13	PCBs	Aroclor 1242	FW	3	0	19	20	9.7	0.29
13	PCBs	Aroclor 1248	FW	3	0	19	20	9.7	0.29
13	PCBs	Aroclor 1254	FW	3	3	26	48	38	11
13	PCBs	Aroclor 1260	FW	3	2	19	73	39	32
13	PCBs	PCB 77	FW	3	3	0.0049	0.031	0.016	0.014
13	PCBs	PCB 105	FW	3	3	0.63	3.0	1.8	1.2
13	PCBs	PCB 114	FW	3	3	0.050	0.33	0.18	0.14
13	PCBs	PCB 118	FW	3	3	0.84	5.2	2.9	2.2
13	PCBs	PCB 123	FW	3	3	0.012	0.076	0.034	0.036
13	PCBs	PCB 126	FW	3	0	0.0022	0.0044	0.0016	0.00058
13	PCBs	PCB 156	FW	3	3	0.23	1.3	0.72	0.51
13	PCBs	PCB 157	FW	3	3	0.042	0.22	0.13	0.089
13	PCBs	PCB 167	FW	3	3	0.016	0.16	0.072	0.076
13	PCBs	PCB 169	FW	3	0	0.0010	0.0024	0.00082	0.00034
13	PCBs	PCB 170	FW	3	3	0.42	2.4	1.3	1.00
13	PCBs	PCB 180	FW	3	3	1.2	7.9	4.3	3.4
13	PCBs	PCB 189	FW	3	3	0.016	0.098	0.053	0.042
13	Pesticides	Aldrin	FW	3	0	1.9	2.0	0.97	0.029
13	Pesticides	Alpha-BHC	FW	3	0	1.9	2.0	0.97	0.029
13	Pesticides	Alpha-Chlordane	FW	3	1	1.9	2.4	1.3	0.52
13	Pesticides	Beta-BHC	FW	3	0	1.9	2.0	0.97	0.029
13	Pesticides	cis-Chlordane (alpha-Chlordane)	FW	3	2	1.9	11	4.9	5.4
13	Pesticides	cis-Nonachlor	FW	3	2	1.9	16	8.5	7.5
13	Pesticides	DDD-o,p'	FW	3	3	4.0	7.6	5.8	1.8
13	Pesticides	DDE-o,p'	FW	3	3	1.5	11	6.0	4.8

Appendix D-1: Site Summary Statistics
White Sturgeon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
13	Pesticides	DDT-o,p'	FW	3	2	1.9	6.9	4.1	3.0
13	Pesticides	DDD-p,p'	FW	3	3	25	55	39	15
13	Pesticides	DDE-p,p'	FW	3	3	150	770	440	310
13	Pesticides	DDT-p,p'	FW	3	3	16	31	23	7.7
13	Pesticides	DDMU	FW	3	3	2.6	18	8.9	8.1
13	Pesticides	Delta-BHC	FW	3	0	1.9	2.0	0.97	0.029
13	Pesticides	Endosulfan Sulfate	FW	3	0	2.0	2.0	1.0	na
13	Pesticides	Gamma-Chlordane	FW	3	3	1.6	2.5	2.0	0.47
13	Pesticides	Gamma-Chlordene	FW	3	0	1.9	2.0	0.97	0.029
13	Pesticides	Heptachlor	FW	3	0	1.9	2.0	0.97	0.029
13	Pesticides	Heptachlor Epoxide	FW	3	0	2.0	2.0	1.0	na
13	Pesticides	Hexachlorobenzene	FW	3	3	2.6	6.5	4.6	2.0
13	Pesticides	Lindane	FW	3	0	1.9	2.0	0.97	0.029
13	Pesticides	Mirex	FW	3	0	1.9	2.0	0.97	0.029
13	Pesticides	Oxychlordane	FW	3	0	1.9	2.0	0.97	0.029
13	Pesticides	Pentachloroanisole	FW	3	0	1.9	2.0	0.97	0.029
13	Pesticides	Toxaphene	FW	3	0	56	60	29	0.88
13	Pesticides	trans-Nonachlor	FW	3	2	1.9	16	7.4	7.8
13	Semivolatiles	1,2,4-Trichlorobenzene	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	1,2-Diphenylhydrazine	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	2,4-Dinitrotoluene	FW	3	0	10	18	7.7	2.2
13	Semivolatiles	2,6-Dinitrotoluene	FW	3	0	21	37	15	4.5
13	Semivolatiles	2-Chloronaphthalene	FW	3	0	10	18	7.7	2.2
13	Semivolatiles	4-Bromophenyl-Phenylether	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	4-Chlorophenyl-Phenylether	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	Acenaphthene	FW	3	0	10	18	7.7	2.2
13	Semivolatiles	Acenaphthylene	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	Anthracene	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	Benzene, 1,2-dichloro-	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	Benzene, 1,3-dichloro-	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	Benzene, 1,4-dichloro-	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	Benzo(a)anthracene	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	Benzo(a)pyrene	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	Benzo(g,h,i)perylene	FW	3	0	10	18	7.7	2.2
13	Semivolatiles	Benzo[b]fluoranthene	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	Benzo[k]fluoranthene	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	bis(2-Chloroisopropyl)ether	FW	3	0	10	18	7.7	2.2
13	Semivolatiles	Chrysene	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	Dibenz[a,h]anthracene	FW	3	0	10	18	7.7	2.2
13	Semivolatiles	Dibenzofuran	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	Fluoranthene	FW	3	0	10	18	7.7	2.2
13	Semivolatiles	9H-Fluorene	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	Hexachlorobutadiene	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	Hexachloroethane	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	Indeno(1,2,3-cd)pyrene	FW	3	0	10	18	7.7	2.2
13	Semivolatiles	Naphthalene	FW	3	0	19	23	11	1.1
13	Semivolatiles	Naphthalene, 1-methyl-	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	Naphthalene, 2-methyl-	FW	3	0	6.4	9.1	4.0	0.75
13	Semivolatiles	Nitrobenzene	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	Phenanthrene	FW	3	0	5.2	9.1	3.8	1.1
13	Semivolatiles	Pyrene	FW	3	0	10	18	7.7	2.2
13	Semivolatiles	Retene	FW	3	0	10	18	7.7	2.2
9a-d	Dioxin/furans	2,3,7,8-TCDD	FW	3	3	0.00044	0.0014	0.00096	0.00048
9a-d	Dioxin/furans	2,3,7,8-TCDD	WB	January-00	January-00	0.00028	0.0012	0.00078	0.00046
9a-d	Dioxin/furans	1,2,3,7,8-PeCDD	FW	3	2	0.000010	0.000070	0.000035	0.000033
9a-d	Dioxin/furans	1,2,3,7,8-PeCDD	WB	January-00	January-00	0.000010	0.000010	0.000010	0.00
9a-d	Dioxin/furans	1,2,3,4,7,8-HxCDD	FW	3	3	0.000040	0.000050	0.000039	0.000011
9a-d	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	January-00	January-00	0.000010	0.000030	0.000017	0.000012
9a-d	Dioxin/furans	1,2,3,6,7,8-HxCDD	FW	3	3	0.00011	0.00028	0.00021	0.00010
9a-d	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	January-00	January-00	0.000010	0.00043	0.00020	0.00021
9a-d	Dioxin/furans	1,2,3,7,8,9-HxCDD	FW	3	1	0.000030	0.000060	0.000032	0.000025
9a-d	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	January-00	January-00	0.000010	0.000040	0.000027	0.000015
9a-d	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FW	3	3	0.00024	0.00068	0.00045	0.00023
9a-d	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	January-00	January-00	0.000010	0.00084	0.00037	0.00043
9a-d	Dioxin/furans	OCDD	FW	3	3	0.00072	0.0019	0.0013	0.00058
9a-d	Dioxin/furans	OCDD	WB	January-00	January-00	0.00061	0.0025	0.0014	0.00098
9a-d	Dioxin/furans	2,3,7,8-TCDF	FW	3	3	0.017	0.054	0.038	0.019
9a-d	Dioxin/furans	2,3,7,8-TCDF	WB	January-00	January-00	0.0080	0.042	0.020	0.019
9a-d	Dioxin/furans	1,2,3,7,8-PeCDF	FW	3	3	0.00028	0.00046	0.00036	0.000091
9a-d	Dioxin/furans	1,2,3,7,8-PeCDF	WB	January-00	January-00	0.00027	0.00038	0.00033	0.000057
9a-d	Dioxin/furans	2,3,4,7,8-PeCDF	FW	3	3	0.00028	0.00040	0.00034	0.000060
9a-d	Dioxin/furans	2,3,4,7,8-PeCDF	WB	January-00	January-00	0.00022	0.00044	0.00036	0.00012
9a-d	Dioxin/furans	1,2,3,4,7,8-HxCDF	FW	3	3	0.000045	0.000080	0.000055	0.000023
9a-d	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	January-00	January-00	0.000010	0.00015	0.000067	0.000074
9a-d	Dioxin/furans	1,2,3,6,7,8-HxCDF	FW	3	3	0.000060	0.00011	0.000077	0.000031
9a-d	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	January-00	January-00	0.000080	0.00015	0.00011	0.000038

Appendix D-1: Site Summary Statistics
White Sturgeon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
9a-d	Dioxin/furans	1,2,3,7,8,9-HxCDF	FW	3	0	0.000020	0.000035	0.000014	0.0000038
9a-d	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	January-00	January-00	0.000010	0.000020	0.000013	0.0000058
9a-d	Dioxin/furans	2,3,4,6,7,8-HxCDF	FW	3	3	0.000030	0.000050	0.000038	0.000011
9a-d	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	January-00	January-00	0.000010	0.000070	0.000033	0.000032
9a-d	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FW	3	3	0.00012	0.00021	0.00015	0.000059
9a-d	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	January-00	January-00	0.000020	0.00020	0.00010	0.000091
9a-d	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FW	3	0	0.000030	0.000065	0.000026	0.0000095
9a-d	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	January-00	January-00	0.000010	0.000030	0.000020	0.000010
9a-d	Dioxin/furans	OCDF	FW	3	2	0.000020	0.00032	0.00017	0.00016
9a-d	Dioxin/furans	OCDF	WB	January-00	January-00	0.000020	0.00023	0.00012	0.00011
9a-d	Guaiacols/Phenols	4-Chloroguaiacol	FW	3	0	860	970	470	32
9a-d	Guaiacols/Phenols	4-Chloroguaiacol	WB	January-00	January-00	860	950	890	46
9a-d	Guaiacols/Phenols	3,4-Dichloroguaiacol	FW	3	0	860	970	470	32
9a-d	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	January-00	January-00	860	950	890	46
9a-d	Guaiacols/Phenols	4,5-Dichloroguaiacol	FW	3	0	860	970	470	32
9a-d	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	January-00	January-00	860	950	890	46
9a-d	Guaiacols/Phenols	4,6-Dichloroguaiacol	FW	3	0	860	970	470	32
9a-d	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	January-00	January-00	860	950	890	46
9a-d	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FW	3	0	860	970	470	32
9a-d	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	January-00	January-00	860	950	890	46
9a-d	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FW	3	0	340	390	190	13
9a-d	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	January-00	January-00	340	380	360	18
9a-d	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FW	3	0	860	970	470	32
9a-d	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	January-00	January-00	860	950	890	46
9a-d	Guaiacols/Phenols	Tetrachloroguaiacol	FW	3	0	340	390	190	13
9a-d	Guaiacols/Phenols	Tetrachloroguaiacol	WB	January-00	January-00	340	380	360	18
9a-d	Guaiacols/Phenols	2-Chlorophenol	FW	3	0	340	390	190	13
9a-d	Guaiacols/Phenols	2-Chlorophenol	WB	January-00	January-00	340	380	360	18
9a-d	Guaiacols/Phenols	4-Chloro-3-methylphenol	FW	3	0	340	390	190	13
9a-d	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	January-00	January-00	340	380	360	18
9a-d	Guaiacols/Phenols	2,4-Dichlorophenol	FW	3	0	340	390	190	13
9a-d	Guaiacols/Phenols	2,4-Dichlorophenol	WB	January-00	January-00	340	380	360	18
9a-d	Guaiacols/Phenols	2,4-Dimethylphenol	FW	3	0	860	970	470	32
9a-d	Guaiacols/Phenols	2,4-Dimethylphenol	WB	January-00	January-00	860	950	890	46
9a-d	Guaiacols/Phenols	2,4,5-Trichlorophenol	FW	3	0	340	390	190	13
9a-d	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	January-00	January-00	340	380	360	18
9a-d	Guaiacols/Phenols	2,4,6-Trichlorophenol	FW	3	0	340	390	190	13
9a-d	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	January-00	January-00	340	380	360	18
9a-d	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FW	3	0	340	390	190	13
9a-d	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	January-00	January-00	340	380	360	18
9a-d	Guaiacols/Phenols	Pentachlorophenol	FW	3	0	340	390	190	13
9a-d	Guaiacols/Phenols	Pentachlorophenol	WB	January-00	January-00	340	380	360	18
9a-d	Guaiacols/Phenols	Phenol	FW	3	0	340	390	190	13
9a-d	Guaiacols/Phenols	Phenol	WB	January-00	January-00	340	380	360	18
9a-d	Metals	Aluminum	FW	3	1	1,000	1,600	770	470
9a-d	Metals	Aluminum	WB	January-00	January-00	6,800	102,000	56,600	47,700
9a-d	Metals	Antimony	FW	3	0	50	50	25	0.00
9a-d	Metals	Antimony	WB	January-00	January-00	50	50	50	0.00
9a-d	Metals	Arsenic	FW	3	3	260	390	330	67
9a-d	Metals	Arsenic	WB	January-00	January-00	240	360	300	60
9a-d	Metals	Barium	FW	3	2	200	340	240	120
9a-d	Metals	Barium	WB	January-00	January-00	1,600	2,800	2,200	630
9a-d	Metals	Beryllium	FW	3	1	4.0	4.0	2.3	0.58
9a-d	Metals	Beryllium	WB	January-00	January-00	4.0	6.9	5.5	1.5
9a-d	Metals	Cadmium	FW	3	0	4.0	4.0	2.0	0.00
9a-d	Metals	Cadmium	WB	January-00	January-00	15	75	44	30
9a-d	Metals	Chromium	FW	3	2	100	150	100	50
9a-d	Metals	Chromium	WB	January-00	January-00	310	650	490	170
9a-d	Metals	Cobalt	FW	3	3	28	150	70	69
9a-d	Metals	Cobalt	WB	January-00	January-00	190	340	270	76
9a-d	Metals	Copper	FW	3	3	210	340	270	69
9a-d	Metals	Copper	WB	January-00	January-00	820	1,800	1,200	550
9a-d	Metals	Lead	FW	3	2	10	13	8.7	4.0
9a-d	Metals	Lead	WB	January-00	January-00	27	220	130	95
9a-d	Metals	Manganese	FW	3	3	200	370	260	97
9a-d	Metals	Manganese	WB	January-00	January-00	1,200	5,400	3,900	2,400
9a-d	Metals	Mercury	FW	3	3	100	110	110	5.6
9a-d	Metals	Mercury	WB	January-00	January-00	100	220	140	68
9a-d	Metals	Nickel	FW	3	1	30	36	20	7.8
9a-d	Metals	Nickel	WB	January-00	January-00	210	2,000	860	970
9a-d	Metals	Selenium	FW	3	3	1,300	2,700	1,800	810
9a-d	Metals	Selenium	WB	January-00	January-00	660	920	790	130
9a-d	Metals	Silver	FW	3	0	100	100	50	0.00
9a-d	Metals	Silver	WB	January-00	January-00	100	100	100	0.00
9a-d	Metals	Thallium	FW	3	0	50	50	25	0.00
9a-d	Metals	Thallium	WB	January-00	January-00	50	50	50	0.00

Appendix D-1: Site Summary Statistics
White Sturgeon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
9a-d	Metals	Vanadium	FW	3	1	10	15	8.8	4.6
9a-d	Metals	Vanadium	WB	January-00	January-00	71	530	280	230
9a-d	Metals	Zinc	FW	3	3	3,100	3,400	3,200	160
9a-d	Metals	Zinc	WB	January-00	January-00	7,500	11,900	9,200	2,400
9a-d	PCBs	Aroclor 1016	FW	3	0	19	20	9.8	0.25
9a-d	PCBs	Aroclor 1016	WB	January-00	January-00	19	19	19	0.00
9a-d	PCBs	Aroclor 1221	FW	3	0	19	20	9.8	0.25
9a-d	PCBs	Aroclor 1221	WB	January-00	January-00	19	19	19	0.00
9a-d	PCBs	Aroclor 1232	FW	3	0	19	20	9.8	0.25
9a-d	PCBs	Aroclor 1232	WB	January-00	January-00	19	19	19	0.00
9a-d	PCBs	Aroclor 1242	FW	3	0	19	20	9.8	0.25
9a-d	PCBs	Aroclor 1242	WB	January-00	January-00	19	19	19	0.00
9a-d	PCBs	Aroclor 1248	FW	3	0	19	20	9.8	0.25
9a-d	PCBs	Aroclor 1248	WB	January-00	January-00	19	19	19	0.00
9a-d	PCBs	Aroclor 1254	FW	3	3	49	110	78	31
9a-d	PCBs	Aroclor 1254	WB	January-00	January-00	60	79	68	9.7
9a-d	PCBs	Aroclor 1260	FW	3	3	48	98	81	29
9a-d	PCBs	Aroclor 1260	WB	January-00	January-00	41	78	59	19
9a-d	PCBs	PCB 77	FW	3	3	0.0077	0.031	0.018	0.012
9a-d	PCBs	PCB 77	WB	January-00	January-00	0.012	0.017	0.015	0.0025
9a-d	PCBs	PCB 105	FW	3	3	1.7	3.6	2.8	0.95
9a-d	PCBs	PCB 105	WB	January-00	January-00	2.5	3.4	2.8	0.52
9a-d	PCBs	PCB 114	FW	3	3	0.14	0.34	0.25	0.10
9a-d	PCBs	PCB 114	WB	January-00	January-00	0.17	0.26	0.22	0.046
9a-d	PCBs	PCB 118	FW	3	3	2.0	5.0	3.2	1.5
9a-d	PCBs	PCB 118	WB	January-00	January-00	2.7	4.8	3.8	1.1
9a-d	PCBs	PCB 123	FW	3	3	0.030	0.094	0.054	0.035
9a-d	PCBs	PCB 123	WB	January-00	January-00	0.044	0.066	0.054	0.011
9a-d	PCBs	PCB 126	FW	3	0	0.0014	0.0017	0.00077	0.000080
9a-d	PCBs	PCB 126	WB	January-00	January-00	0.0015	0.0018	0.0017	0.00013
9a-d	PCBs	PCB 156	FW	3	3	0.73	1.7	1.3	0.51
9a-d	PCBs	PCB 156	WB	January-00	January-00	1.0	1.8	1.3	0.40
9a-d	PCBs	PCB 157	FW	3	3	0.14	0.33	0.23	0.096
9a-d	PCBs	PCB 157	WB	January-00	January-00	0.18	0.31	0.23	0.071
9a-d	PCBs	PCB 167	FW	3	3	0.024	0.079	0.043	0.030
9a-d	PCBs	PCB 167	WB	January-00	January-00	0.032	0.050	0.038	0.010
9a-d	PCBs	PCB 169	FW	3	0	0.0014	0.0022	0.00083	0.00022
9a-d	PCBs	PCB 169	WB	January-00	January-00	0.0012	0.0015	0.0013	0.00015
9a-d	PCBs	PCB 170	FW	3	3	1.5	3.8	2.9	1.2
9a-d	PCBs	PCB 170	WB	January-00	January-00	1.6	2.8	2.3	0.65
9a-d	PCBs	PCB 180	FW	3	3	4.7	10	8.2	3.0
9a-d	PCBs	PCB 180	WB	January-00	January-00	5.2	10	7.5	2.5
9a-d	PCBs	PCB 189	FW	3	3	0.053	0.13	0.10	0.043
9a-d	PCBs	PCB 189	WB	January-00	January-00	0.066	0.11	0.088	0.023
9a-d	Pesticides	Aldrin	FW	3	3	1.1	1.3	1.2	0.13
9a-d	Pesticides	Aldrin	WB	January-00	January-00	0.97	2.0	1.4	0.56
9a-d	Pesticides	Alpha-BHC	FW	3	0	1.9	2.0	0.98	0.025
9a-d	Pesticides	Alpha-BHC	WB	January-00	January-00	1.9	1.9	1.9	0.00000
9a-d	Pesticides	Alpha-Chlordane	FW	3	0	1.9	2.0	0.98	0.025
9a-d	Pesticides	Alpha-Chlordane	WB	January-00	January-00	1.9	1.9	1.9	0.00000
9a-d	Pesticides	Beta-BHC	FW	3	0	1.9	2.0	0.98	0.025
9a-d	Pesticides	Beta-BHC	WB	January-00	January-00	1.9	1.9	1.9	0.00000
9a-d	Pesticides	cis-Chlordane (alpha-Chlordane)	FW	3	3	3.0	8.5	5.2	2.9
9a-d	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	January-00	January-00	2.3	9.2	5.1	3.6
9a-d	Pesticides	cis-Nonachlor	FW	3	3	7.2	15	12	4.1
9a-d	Pesticides	cis-Nonachlor	WB	January-00	January-00	8.3	13	10	2.4
9a-d	Pesticides	DDD-o,p'	FW	3	3	16	18	17	1.2
9a-d	Pesticides	DDD-o,p'	WB	January-00	January-00	9.3	16	13	3.6
9a-d	Pesticides	DDE-o,p'	FW	3	2	1.9	7.4	4.3	3.2
9a-d	Pesticides	DDE-o,p'	WB	January-00	January-00	5.1	6.0	5.5	0.47
9a-d	Pesticides	DDT-o,p'	FW	3	0	1.9	2.0	0.98	0.025
9a-d	Pesticides	DDT-o,p'	WB	January-00	January-00	1.9	1.9	1.9	0.00000
9a-d	Pesticides	DDD-p,p'	FW	3	3	130	160	150	16
9a-d	Pesticides	DDD-p,p'	WB	January-00	January-00	100	130	120	17
9a-d	Pesticides	DDE-p,p'	FW	3	3	420	670	570	130
9a-d	Pesticides	DDE-p,p'	WB	January-00	January-00	400	560	500	87
9a-d	Pesticides	DDT-p,p'	FW	3	3	5.5	9.9	7.0	2.6
9a-d	Pesticides	DDT-p,p'	WB	January-00	January-00	5.6	22	11	9.3
9a-d	Pesticides	DDMU	FW	3	3	4.1	15	10	5.6
9a-d	Pesticides	DDMU	WB	January-00	January-00	3.8	9.5	6.9	2.9
9a-d	Pesticides	Delta-BHC	FW	3	0	1.9	2.0	0.98	0.025
9a-d	Pesticides	Delta-BHC	WB	January-00	January-00	1.9	1.9	1.9	0.00000
9a-d	Pesticides	Endosulfan Sulfate	FW	3	0	1.9	2.0	0.98	0.025
9a-d	Pesticides	Endosulfan Sulfate	WB	January-00	January-00	1.9	1.9	1.9	0.00000
9a-d	Pesticides	Gamma-Chlordane	FW	3	3	5.9	7.4	6.7	0.76
9a-d	Pesticides	Gamma-Chlordane	WB	January-00	January-00	3.4	17	8.8	7.2

Appendix D-1: Site Summary Statistics
White Sturgeon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
9a-d	Pesticides	Gamma-Chlordene	FW	3	0	1.9	2.0	0.98	0.025
9a-d	Pesticides	Gamma-Chlordene	WB	January-00	January-00	1.9	1.9	1.9	0.00000
9a-d	Pesticides	Heptachlor	FW	3	0	1.9	2.0	0.98	0.025
9a-d	Pesticides	Heptachlor	WB	January-00	January-00	1.9	1.9	1.9	0.00000
9a-d	Pesticides	Heptachlor Epoxide	FW	3	0	1.9	2.0	0.98	0.025
9a-d	Pesticides	Heptachlor Epoxide	WB	January-00	January-00	1.9	1.9	1.9	0.00000
9a-d	Pesticides	Hexachlorobenzene	FW	3	3	9.9	13	12	1.6
9a-d	Pesticides	Hexachlorobenzene	WB	January-00	January-00	4.1	18	12	7.2
9a-d	Pesticides	Lindane	FW	3	0	1.9	2.0	0.98	0.025
9a-d	Pesticides	Lindane	WB	January-00	January-00	1.9	1.9	1.9	0.00000
9a-d	Pesticides	Mirex	FW	3	0	1.9	2.0	0.98	0.025
9a-d	Pesticides	Mirex	WB	January-00	January-00	1.9	1.9	1.9	0.00000
9a-d	Pesticides	Oxychlordane	FW	3	2	1.1	2.0	1.3	0.44
9a-d	Pesticides	Oxychlordane	WB	January-00	January-00	0.95	2.5	1.7	0.79
9a-d	Pesticides	Pentachloroanisol	FW	3	0	1.9	2.0	0.98	0.025
9a-d	Pesticides	Pentachloroanisol	WB	January-00	January-00	1.9	1.9	1.9	0.00000
9a-d	Pesticides	Toxaphene	FW	3	0	58	59	29	0.29
9a-d	Pesticides	Toxaphene	WB	January-00	January-00	57	58	57	0.58
9a-d	Pesticides	trans-Nonachlor	FW	3	3	5.1	13	9.5	3.9
9a-d	Pesticides	trans-Nonachlor	WB	January-00	January-00	7.4	11	8.6	2.1
9a-d	Semivolatiles	1,2,4-Trichlorobenzene	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	1,2,4-Trichlorobenzene	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	1,2-Diphenylhydrazine	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	1,2-Diphenylhydrazine	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	2,4-Dinitrotoluene	FW	3	0	17	19	9.3	0.63
9a-d	Semivolatiles	2,4-Dinitrotoluene	WB	January-00	January-00	17	19	18	0.91
9a-d	Semivolatiles	2,6-Dinitrotoluene	FW	3	0	34	39	19	1.3
9a-d	Semivolatiles	2,6-Dinitrotoluene	WB	January-00	January-00	34	38	36	1.8
9a-d	Semivolatiles	2-Chloronaphthalene	FW	3	0	17	19	9.3	0.63
9a-d	Semivolatiles	2-Chloronaphthalene	WB	January-00	January-00	17	19	18	0.91
9a-d	Semivolatiles	4-Bromophenyl-Phenylether	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	4-Bromophenyl-Phenylether	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	4-Chlorophenyl-Phenylether	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	4-Chlorophenyl-Phenylether	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	Acenaphthene	FW	3	0	17	19	9.3	0.63
9a-d	Semivolatiles	Acenaphthene	WB	January-00	January-00	17	19	18	0.91
9a-d	Semivolatiles	Acenaphthylene	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	Acenaphthylene	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	Anthracene	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	Anthracene	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	Benzene, 1,2-dichloro-	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	Benzene, 1,2-dichloro-	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	Benzene, 1,3-dichloro-	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	Benzene, 1,3-dichloro-	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	Benzene, 1,4-dichloro-	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	Benzene, 1,4-dichloro-	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	Benzo(a)anthracene	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	Benzo(a)anthracene	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	Benzo(a)pyrene	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	Benzo(a)pyrene	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	Benzo(g,h,i)perylene	FW	3	0	17	19	9.3	0.63
9a-d	Semivolatiles	Benzo(g,h,i)perylene	WB	January-00	January-00	17	19	18	0.91
9a-d	Semivolatiles	Benzo[b]Fluoranthene	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	Benzo[b]Fluoranthene	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	Benzo[k]fluoranthene	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	Benzo[k]fluoranthene	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	bis(2-Chloroisopropyl)ether	FW	3	0	17	19	9.3	0.63
9a-d	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	January-00	January-00	17	19	18	0.91
9a-d	Semivolatiles	Chrysene	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	Chrysene	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	Dibenz[a,h]anthracene	FW	3	0	17	19	9.3	0.63
9a-d	Semivolatiles	Dibenz[a,h]anthracene	WB	January-00	January-00	17	19	18	0.91
9a-d	Semivolatiles	Dibenzofuran	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	Dibenzofuran	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	Fluoranthene	FW	3	0	17	19	9.3	0.63
9a-d	Semivolatiles	Fluoranthene	WB	January-00	January-00	17	19	18	0.91
9a-d	Semivolatiles	9H-Fluorene	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	9H-Fluorene	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	Hexachlorobutadiene	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	Hexachlorobutadiene	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	Hexachloroethane	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	Hexachloroethane	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	Indeno(1,2,3-cd)pyrene	FW	3	0	17	19	9.3	0.63
9a-d	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	January-00	January-00	17	19	18	0.91
9a-d	Semivolatiles	Naphthalene	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	Naphthalene	WB	January-00	January-00	8.6	9.4	8.9	0.44

Appendix D-1: Site Summary Statistics
White Sturgeon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
9a-d	Semivolatiles	Naphthalene, 1-methyl-	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	Naphthalene, 1-methyl-	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	Naphthalene, 2-methyl-	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	Naphthalene, 2-methyl-	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	Nitrobenzene	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	Nitrobenzene	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	Phenanthrene	FW	3	0	8.6	9.8	4.7	0.31
9a-d	Semivolatiles	Phenanthrene	WB	January-00	January-00	8.6	9.4	8.9	0.44
9a-d	Semivolatiles	Pyrene	FW	3	0	17	19	9.3	0.63
9a-d	Semivolatiles	Pyrene	WB	January-00	January-00	17	19	18	0.91
9a-d	Semivolatiles	Retene	FW	3	0	17	19	9.3	0.63
9a-d	Semivolatiles	Retene	WB	January-00	January-00	17	19	18	0.91
9e+	Dioxin/furans	2,3,7,8-TCDD	FW	1	1	0.00024	0.00024	0.00024	na
9e+	Dioxin/furans	2,3,7,8-TCDD	WB	2	2	0.000060	0.0013	0.00066	0.00084
9e+	Dioxin/furans	1,2,3,7,8-PeCDD	FW	1	1	0.000050	0.000050	0.000050	na
9e+	Dioxin/furans	1,2,3,7,8-PeCDD	WB	2	2	0.000030	0.000090	0.000060	0.000042
9e+	Dioxin/furans	1,2,3,4,7,8-HxCDD	FW	1	0	0.000030	0.000030	0.000015	na
9e+	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	2	0	0.000040	0.000050	0.000023	0.0000035
9e+	Dioxin/furans	1,2,3,6,7,8-HxCDD	FW	1	1	0.00012	0.00012	0.00012	na
9e+	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	2	2	0.000070	0.00034	0.00021	0.00019
9e+	Dioxin/furans	1,2,3,7,8,9-HxCDD	FW	1	1	0.000040	0.000040	0.000035	na
9e+	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	2	1	0.000040	0.000050	0.000035	0.000021
9e+	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FW	1	1	0.00016	0.00016	0.00016	na
9e+	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	2	2	0.00038	0.00075	0.00057	0.00026
9e+	Dioxin/furans	OCDD	FW	1	1	0.00059	0.00059	0.00059	na
9e+	Dioxin/furans	OCDD	WB	2	2	0.0015	0.0035	0.0025	0.0014
9e+	Dioxin/furans	2,3,7,8-TCDF	FW	1	1	0.022	0.022	0.022	na
9e+	Dioxin/furans	2,3,7,8-TCDF	WB	2	2	0.0090	0.047	0.028	0.027
9e+	Dioxin/furans	1,2,3,7,8-PeCDF	FW	1	1	0.00016	0.00016	0.00016	na
9e+	Dioxin/furans	1,2,3,7,8-PeCDF	WB	2	2	0.00012	0.00047	0.00030	0.00025
9e+	Dioxin/furans	2,3,4,7,8-PeCDF	FW	1	1	0.00023	0.00023	0.00023	na
9e+	Dioxin/furans	2,3,4,7,8-PeCDF	WB	2	2	0.00013	0.00053	0.00033	0.00028
9e+	Dioxin/furans	1,2,3,4,7,8-HxCDF	FW	1	1	0.000035	0.000035	0.000028	na
9e+	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	2	2	0.000030	0.00012	0.000075	0.000064
9e+	Dioxin/furans	1,2,3,6,7,8-HxCDF	FW	1	1	0.000040	0.000040	0.000033	na
9e+	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	2	1	0.000030	0.000050	0.000028	0.0000035
9e+	Dioxin/furans	1,2,3,7,8,9-HxCDF	FW	1	0	0.000030	0.000030	0.000015	na
9e+	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	2	1	0.000030	0.000050	0.000033	0.000025
9e+	Dioxin/furans	2,3,4,6,7,8-HxCDF	FW	1	1	0.000040	0.000040	0.000040	na
9e+	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	2	1	0.000030	0.000050	0.000033	0.000025
9e+	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FW	1	0	0.000090	0.000090	0.000045	na
9e+	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	2	1	0.00011	0.00021	0.00013	0.00011
9e+	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FW	1	0	0.000090	0.000090	0.000045	na
9e+	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	2	0	0.00011	0.00017	0.000070	0.000021
9e+	Dioxin/furans	OCDF	FW	1	1	0.00022	0.00022	0.00022	na
9e+	Dioxin/furans	OCDF	WB	2	2	0.00033	0.00095	0.00064	0.00044
9e+	Guaiacols/Phenols	4-Chloroguaiacol	FW	1	0	920	920	460	na
9e+	Guaiacols/Phenols	4-Chloroguaiacol	WB	2	0	940	970	480	10
9e+	Guaiacols/Phenols	3,4-Dichloroguaiacol	FW	1	0	920	920	460	na
9e+	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	2	0	940	970	480	10
9e+	Guaiacols/Phenols	4,5-Dichloroguaiacol	FW	1	0	920	920	460	na
9e+	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	2	0	940	970	480	10
9e+	Guaiacols/Phenols	4,6-Dichloroguaiacol	FW	1	0	920	920	460	na
9e+	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	2	0	940	970	480	10
9e+	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FW	1	0	920	920	460	na
9e+	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	2	0	940	970	480	10
9e+	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FW	1	0	370	370	180	na
9e+	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	2	0	380	390	190	4.2
9e+	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FW	1	0	920	920	460	na
9e+	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	2	0	940	970	480	10
9e+	Guaiacols/Phenols	Tetrachloroguaiacol	FW	1	1	370	370	180	na
9e+	Guaiacols/Phenols	Tetrachloroguaiacol	WB	2	0	380	390	190	4.2
9e+	Guaiacols/Phenols	2-Chlorophenol	FW	1	0	370	370	180	na
9e+	Guaiacols/Phenols	2-Chlorophenol	WB	2	0	380	390	190	4.2
9e+	Guaiacols/Phenols	4-Chloro-3-methylphenol	FW	1	0	370	370	180	na
9e+	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	2	0	380	390	190	4.2
9e+	Guaiacols/Phenols	2,4-Dichlorophenol	FW	1	0	370	370	180	na
9e+	Guaiacols/Phenols	2,4-Dichlorophenol	WB	2	0	380	390	190	4.2
9e+	Guaiacols/Phenols	2,4-Dimethylphenol	FW	1	0	920	920	460	na
9e+	Guaiacols/Phenols	2,4-Dimethylphenol	WB	2	0	940	970	480	10
9e+	Guaiacols/Phenols	2,4,5-Trichlorophenol	FW	1	0	370	370	180	na
9e+	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	2	0	380	390	190	4.2
9e+	Guaiacols/Phenols	2,4,6-Trichlorophenol	FW	1	0	370	370	180	na
9e+	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	2	0	380	390	190	4.2
9e+	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FW	1	0	370	370	180	na
9e+	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	2	0	380	390	190	4.2

Appendix D-1: Site Summary Statistics
White Sturgeon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
9e+	Guaiacols/Phenols	Pentachlorophenol	FW	1	0	370	370	180	na
9e+	Guaiacols/Phenols	Pentachlorophenol	WB	2	0	380	390	190	4.2
9e+	Guaiacols/Phenols	Phenol	FW	1	0	370	370	180	na
9e+	Guaiacols/Phenols	Phenol	WB	2	0	380	390	190	4.2
9e+	Metals	Aluminum	FW	1	0	1,000	1,000	500	na
9e+	Metals	Aluminum	WB	2	1	1,000	1,600	1,100	800
9e+	Metals	Antimony	FW	1	0	50	50	25	na
9e+	Metals	Antimony	WB	2	0	50	50	25	0.00
9e+	Metals	Arsenic	FW	1	1	260	260	260	na
9e+	Metals	Arsenic	WB	2	2	200	360	280	110
9e+	Metals	Barium	FW	1	1	350	350	300	na
9e+	Metals	Barium	WB	2	2	960	2,100	1,500	830
9e+	Metals	Beryllium	FW	1	0	4.0	4.0	2.0	na
9e+	Metals	Beryllium	WB	2	0	4.0	4.0	2.0	0.00
9e+	Metals	Cadmium	FW	1	1	4.5	4.5	3.5	na
9e+	Metals	Cadmium	WB	2	2	18	48	33	21
9e+	Metals	Chromium	FW	1	1	140	140	140	na
9e+	Metals	Chromium	WB	2	2	110	390	250	200
9e+	Metals	Cobalt	FW	1	1	87	87	87	na
9e+	Metals	Cobalt	WB	2	2	78	340	210	180
9e+	Metals	Copper	FW	1	1	230	230	230	na
9e+	Metals	Copper	WB	2	2	260	1,100	700	620
9e+	Metals	Lead	FW	1	0	10	10	5.0	na
9e+	Metals	Lead	WB	2	2	32	33	33	0.71
9e+	Metals	Manganese	FW	1	1	150	150	150	na
9e+	Metals	Manganese	WB	2	2	330	850	590	370
9e+	Metals	Mercury	FW	1	1	360	360	360	na
9e+	Metals	Mercury	WB	2	1	100	130	92	59
9e+	Metals	Nickel	FW	1	1	35	35	28	na
9e+	Metals	Nickel	WB	2	2	67	170	120	75
9e+	Metals	Selenium	FW	1	1	630	630	630	na
9e+	Metals	Selenium	WB	2	1	500	1,100	660	580
9e+	Metals	Silver	FW	1	0	100	100	50	na
9e+	Metals	Silver	WB	2	0	100	100	50	0.00
9e+	Metals	Thallium	FW	1	0	50	50	25	na
9e+	Metals	Thallium	WB	2	0	50	50	25	0.00
9e+	Metals	Vanadium	FW	1	0	10	10	5.0	na
9e+	Metals	Vanadium	WB	2	1	10	46	26	29
9e+	Metals	Zinc	FW	1	1	4,400	4,400	4,400	na
9e+	Metals	Zinc	WB	2	2	2,400	8,500	5,400	4,300
9e+	PCBs	Aroclor 1016	FW	1	0	19	19	9.5	na
9e+	PCBs	Aroclor 1016	WB	2	0	18	19	9.3	0.35
9e+	PCBs	Aroclor 1221	FW	1	0	19	19	9.5	na
9e+	PCBs	Aroclor 1221	WB	2	0	18	19	9.3	0.35
9e+	PCBs	Aroclor 1232	FW	1	0	19	19	9.5	na
9e+	PCBs	Aroclor 1232	WB	2	0	18	19	9.3	0.35
9e+	PCBs	Aroclor 1242	FW	1	0	19	19	9.5	na
9e+	PCBs	Aroclor 1242	WB	2	0	18	19	9.3	0.35
9e+	PCBs	Aroclor 1248	FW	1	0	19	19	9.5	na
9e+	PCBs	Aroclor 1248	WB	2	0	18	19	9.3	0.35
9e+	PCBs	Aroclor 1254	FW	1	1	190	190	190	na
9e+	PCBs	Aroclor 1254	WB	2	2	83	90	87	4.9
9e+	PCBs	Aroclor 1260	FW	1	1	200	200	200	na
9e+	PCBs	Aroclor 1260	WB	2	2	63	87	75	17
9e+	PCBs	PCB 77	FW	1	1	0.061	0.061	0.061	na
9e+	PCBs	PCB 77	WB	2	2	0.017	0.028	0.022	0.0077
9e+	PCBs	PCB 105	FW	1	1	9.6	9.6	9.6	na
9e+	PCBs	PCB 105	WB	2	2	3.0	3.9	3.4	0.67
9e+	PCBs	PCB 114	FW	1	1	0.75	0.75	0.75	na
9e+	PCBs	PCB 114	WB	2	2	0.22	0.34	0.28	0.082
9e+	PCBs	PCB 118	FW	1	1	14	14	14	na
9e+	PCBs	PCB 118	WB	2	2	3.6	3.6	3.6	0.064
9e+	PCBs	PCB 123	FW	1	1	0.16	0.16	0.16	na
9e+	PCBs	PCB 123	WB	2	2	0.048	0.062	0.055	0.010
9e+	PCBs	PCB 126	FW	1	0	0.0021	0.0021	0.0010	na
9e+	PCBs	PCB 126	WB	2	0	0.0012	0.0015	0.00069	0.00011
9e+	PCBs	PCB 156	FW	1	1	3.5	3.5	3.5	na
9e+	PCBs	PCB 156	WB	2	2	1.1	1.6	1.3	0.34
9e+	PCBs	PCB 157	FW	1	1	0.74	0.74	0.74	na
9e+	PCBs	PCB 157	WB	2	2	0.20	0.28	0.24	0.056
9e+	PCBs	PCB 167	FW	1	1	0.17	0.17	0.17	na
9e+	PCBs	PCB 167	WB	2	2	0.021	0.033	0.027	0.0084
9e+	PCBs	PCB 169	FW	1	0	0.0040	0.0040	0.0020	na
9e+	PCBs	PCB 169	WB	2	0	0.0011	0.0021	0.00079	0.00038
9e+	PCBs	PCB 170	FW	1	1	6.8	6.8	6.8	na
9e+	PCBs	PCB 170	WB	2	2	2.0	2.4	2.2	0.26

Appendix D-1: Site Summary Statistics
White Sturgeon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
9e+	PCBs	PCB 180	FW	1	1	23	23	23	na
9e+	PCBs	PCB 180	WB	2	2	6.9	11	9.1	3.0
9e+	PCBs	PCB 189	FW	1	1	0.31	0.31	0.31	na
9e+	PCBs	PCB 189	WB	2	2	0.087	0.12	0.10	0.024
9e+	Pesticides	Aldrin	FW	1	1	0.94	0.94	0.94	na
9e+	Pesticides	Aldrin	WB	2	1	1.1	1.8	1.0	0.14
9e+	Pesticides	Alpha-BHC	FW	1	0	1.9	1.9	0.95	na
9e+	Pesticides	Alpha-BHC	WB	2	0	1.8	1.9	0.93	0.035
9e+	Pesticides	Alpha-Chlordane	FW	1	0	1.9	1.9	0.95	na
9e+	Pesticides	Alpha-Chlordane	WB	2	0	1.8	1.9	0.93	0.035
9e+	Pesticides	Beta-BHC	FW	1	0	1.9	1.9	0.95	na
9e+	Pesticides	Beta-BHC	WB	2	0	1.8	1.9	0.93	0.035
9e+	Pesticides	cis-Chlordane (alpha-Chlordane)	FW	1	1	3.3	3.3	3.3	na
9e+	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	2	2	2.2	4.3	3.3	1.5
9e+	Pesticides	cis-Nonachlor	FW	1	1	28	28	28	na
9e+	Pesticides	cis-Nonachlor	WB	2	2	12	12	12	0.00
9e+	Pesticides	DDD-o,p'	FW	1	1	24	24	24	na
9e+	Pesticides	DDD-o,p'	WB	2	2	18	22	20	2.8
9e+	Pesticides	DDE-o,p'	FW	1	1	20	20	20	na
9e+	Pesticides	DDE-o,p'	WB	2	2	7.9	8.3	8.1	0.28
9e+	Pesticides	DDT-o,p'	FW	1	0	1.9	1.9	0.95	na
9e+	Pesticides	DDT-o,p'	WB	2	0	1.8	1.9	0.93	0.035
9e+	Pesticides	DDD-p,p'	FW	1	1	350	350	350	na
9e+	Pesticides	DDD-p,p'	WB	2	2	190	200	200	7.1
9e+	Pesticides	DDE-p,p'	FW	1	1	1,400	1,400	1,400	na
9e+	Pesticides	DDE-p,p'	WB	2	2	540	640	590	71
9e+	Pesticides	DDT-p,p'	FW	1	1	17	17	17	na
9e+	Pesticides	DDT-p,p'	WB	2	2	3.9	7.0	5.5	2.2
9e+	Pesticides	DDMU	FW	1	1	46	46	46	na
9e+	Pesticides	DDMU	WB	2	2	13	16	15	2.1
9e+	Pesticides	Delta-BHC	FW	1	0	1.9	1.9	0.95	na
9e+	Pesticides	Delta-BHC	WB	2	0	1.8	1.9	0.93	0.035
9e+	Pesticides	Endosulfan Sulfate	FW	1	0	1.9	1.9	0.95	na
9e+	Pesticides	Endosulfan Sulfate	WB	2	0	1.8	1.9	0.93	0.035
9e+	Pesticides	Gamma-Chlordane	FW	1	1	7.0	7.0	7.0	na
9e+	Pesticides	Gamma-Chlordane	WB	2	2	4.4	7.2	5.8	2.0
9e+	Pesticides	Gamma-Chlordane	FW	1	0	1.9	1.9	0.95	na
9e+	Pesticides	Gamma-Chlordane	WB	2	0	1.8	1.9	0.93	0.035
9e+	Pesticides	Heptachlor	FW	1	0	1.9	1.9	0.95	na
9e+	Pesticides	Heptachlor	WB	2	0	1.8	1.9	0.93	0.035
9e+	Pesticides	Heptachlor Epoxide	FW	1	0	1.9	1.9	0.95	na
9e+	Pesticides	Heptachlor Epoxide	WB	2	0	1.8	1.9	0.93	0.035
9e+	Pesticides	Hexachlorobenzene	FW	1	1	3.2	3.2	3.2	na
9e+	Pesticides	Hexachlorobenzene	WB	2	1	1.8	19	10.0	13
9e+	Pesticides	Lindane	FW	1	0	1.9	1.9	0.95	na
9e+	Pesticides	Lindane	WB	2	0	1.8	1.9	0.93	0.035
9e+	Pesticides	Mirex	FW	1	0	1.9	1.9	0.95	na
9e+	Pesticides	Mirex	WB	2	0	1.8	1.9	0.93	0.035
9e+	Pesticides	Oxychlordane	FW	1	1	2.5	2.5	2.5	na
9e+	Pesticides	Oxychlordane	WB	2	1	1.6	1.8	1.3	0.49
9e+	Pesticides	Pentachloroanisol	FW	1	0	1.9	1.9	0.95	na
9e+	Pesticides	Pentachloroanisol	WB	2	0	1.8	1.9	0.93	0.035
9e+	Pesticides	Toxaphene	FW	1	0	56	56	28	na
9e+	Pesticides	Toxaphene	WB	2	0	55	56	28	0.35
9e+	Pesticides	trans-Nonachlor	FW	1	1	14	14	14	na
9e+	Pesticides	trans-Nonachlor	WB	2	2	4.6	9.3	7.0	3.3
9e+	Semivolatiles	1,2,4-Trichlorobenzene	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	1,2,4-Trichlorobenzene	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	1,2-Diphenylhydrazine	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	1,2-Diphenylhydrazine	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	2,4-Dinitrotoluene	FW	1	0	18	18	9.2	na
9e+	Semivolatiles	2,4-Dinitrotoluene	WB	2	0	19	19	9.6	0.21
9e+	Semivolatiles	2,6-Dinitrotoluene	FW	1	0	37	37	18	na
9e+	Semivolatiles	2,6-Dinitrotoluene	WB	2	0	38	39	19	0.42
9e+	Semivolatiles	2-Chloronaphthalene	FW	1	0	18	18	9.2	na
9e+	Semivolatiles	2-Chloronaphthalene	WB	2	0	19	19	9.6	0.21
9e+	Semivolatiles	4-Bromophenyl-Phenylether	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	4-Bromophenyl-Phenylether	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	4-Chlorophenyl-Phenylether	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	4-Chlorophenyl-Phenylether	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	Acenaphthene	FW	1	0	18	18	9.2	na
9e+	Semivolatiles	Acenaphthene	WB	2	0	19	19	9.6	0.21
9e+	Semivolatiles	Acenaphthylene	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	Acenaphthylene	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	Anthracene	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	Anthracene	WB	2	0	9.4	9.7	4.8	0.11

Appendix D-1: Site Summary Statistics
White Sturgeon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
9e+	Semivolatiles	Benzene, 1,2-dichloro-	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	Benzene, 1,2-dichloro-	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	Benzene, 1,3-dichloro-	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	Benzene, 1,3-dichloro-	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	Benzene, 1,4-dichloro-	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	Benzene, 1,4-dichloro-	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	Benzo(a)anthracene	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	Benzo(a)anthracene	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	Benzo(a)pyrene	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	Benzo(a)pyrene	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	Benzo(g,h,i)perylene	FW	1	0	18	18	9.2	na
9e+	Semivolatiles	Benzo(g,h,i)perylene	WB	2	0	19	19	9.6	0.21
9e+	Semivolatiles	Benzo[b]Fluoranthene	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	Benzo[b]Fluoranthene	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	Benzo[k]fluoranthene	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	Benzo[k]fluoranthene	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	bis(2-Chloroisopropyl)ether	FW	1	0	18	18	9.2	na
9e+	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	2	0	19	19	9.6	0.21
9e+	Semivolatiles	Chrysene	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	Chrysene	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	Dibenz[a,h]anthracene	FW	1	0	18	18	9.2	na
9e+	Semivolatiles	Dibenz[a,h]anthracene	WB	2	0	19	19	9.6	0.21
9e+	Semivolatiles	Dibenzofuran	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	Dibenzofuran	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	Fluoranthene	FW	1	0	18	18	9.2	na
9e+	Semivolatiles	Fluoranthene	WB	2	0	19	19	9.6	0.21
9e+	Semivolatiles	9H-Fluorene	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	9H-Fluorene	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	Hexachlorobutadiene	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	Hexachlorobutadiene	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	Hexachloroethane	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	Hexachloroethane	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	Indeno(1,2,3-cd)pyrene	FW	1	0	18	18	9.2	na
9e+	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	2	0	19	19	9.6	0.21
9e+	Semivolatiles	Naphthalene	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	Naphthalene	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	Naphthalene, 1-methyl-	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	Naphthalene, 1-methyl-	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	Naphthalene, 2-methyl-	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	Naphthalene, 2-methyl-	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	Nitrobenzene	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	Nitrobenzene	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	Phenanthrene	FW	1	0	9.2	9.2	4.6	na
9e+	Semivolatiles	Phenanthrene	WB	2	0	9.4	9.7	4.8	0.11
9e+	Semivolatiles	Pyrene	FW	1	0	18	18	9.2	na
9e+	Semivolatiles	Pyrene	WB	2	0	19	19	9.6	0.21
9e+	Semivolatiles	Retene	FW	1	0	18	18	9.2	na
9e+	Semivolatiles	Retene	WB	2	0	19	19	9.6	0.21

Appendix D-1: Site Summary Statistics
Walleye

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
7	Dioxin/furans	2,3,7,8-TCDD	WB	2	2	0.00036	0.00042	0.00039	0.000042
7	Dioxin/furans	1,2,3,7,8-PeCDD	WB	2	2	0.00019	0.00025	0.00022	0.000042
7	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	2	2	0.000020	0.000040	0.000030	0.000014
7	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	2	2	0.00012	0.00017	0.00015	0.000035
7	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	2	2	0.000030	0.000060	0.000045	0.000021
7	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	2	2	0.00011	0.00013	0.00012	0.000014
7	Dioxin/furans	OCDD	WB	2	2	0.00015	0.00016	0.00016	0.0000071
7	Dioxin/furans	2,3,7,8-TCDF	WB	2	2	0.0043	0.0055	0.0049	0.000087
7	Dioxin/furans	1,2,3,7,8-PeCDF	WB	2	2	0.00012	0.00015	0.00014	0.000021
7	Dioxin/furans	2,3,4,7,8-PeCDF	WB	2	2	0.00020	0.00024	0.00022	0.000028
7	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	2	2	0.000030	0.000030	0.000030	0.00
7	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	2	1	0.000010	0.000030	0.000018	0.000018
7	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	2	0	0.000010	0.000010	0.0000050	0.00
7	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	2	2	0.000040	0.000040	0.000040	0.00
7	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	2	0	0.000020	0.000020	0.000010	0.00
7	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	2	0	0.000020	0.000020	0.000010	0.00
7	Dioxin/furans	OCDF	WB	2	0	0.000010	0.000010	0.0000050	0.00
7	Guaiacols/Phenols	4-Chloroguaiacol	WB	2	0	960	990	490	8.8
7	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	2	0	960	990	490	8.8
7	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	2	0	960	990	490	8.8
7	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	2	0	960	990	490	8.8
7	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	2	0	960	990	490	8.8
7	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	2	0	390	400	200	3.5
7	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	2	0	960	990	490	8.8
7	Guaiacols/Phenols	Tetrachloroguaiacol	WB	2	0	390	400	200	3.5
7	Guaiacols/Phenols	2-Chlorophenol	WB	2	0	390	400	200	3.5
7	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	2	0	390	400	200	3.5
7	Guaiacols/Phenols	2,4-Dichlorophenol	WB	2	0	390	400	200	3.5
7	Guaiacols/Phenols	2,4-Dimethylphenol	WB	2	0	960	990	490	8.8
7	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	2	0	390	400	200	3.5
7	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	2	0	390	400	200	3.5
7	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	2	0	390	400	200	3.5
7	Guaiacols/Phenols	Pentachlorophenol	WB	2	0	390	400	200	3.5
7	Guaiacols/Phenols	Phenol	WB	2	0	390	400	200	3.5
7	Metals	Aluminum	WB	2	0	1,000	1,000	500	0.00
7	Metals	Antimony	WB	2	0	50	50	25	0.00
7	Metals	Arsenic	WB	2	2	490	510	500	13
7	Metals	Barium	WB	2	2	640	860	750	150
7	Metals	Beryllium	WB	2	0	4.0	4.0	2.0	0.00
7	Metals	Cadmium	WB	2	2	7.0	7.9	7.5	0.64
7	Metals	Chromium	WB	2	2	100	120	110	14
7	Metals	Cobalt	WB	2	2	69	80	75	7.8
7	Metals	Copper	WB	2	2	980	5,700	3,300	3,300
7	Metals	Lead	WB	2	2	65	490	280	300
7	Metals	Manganese	WB	2	2	970	970	970	4.2
7	Metals	Mercury	WB	2	2	200	220	210	17
7	Metals	Nickel	WB	2	2	130	250	190	90
7	Metals	Selenium	WB	2	2	470	540	510	49
7	Metals	Silver	WB	2	0	100	100	50	0.00
7	Metals	Thallium	WB	2	0	50	50	25	0.00
7	Metals	Vanadium	WB	2	2	11	12	12	0.71
7	Metals	Zinc	WB	2	2	14,000	15,000	14,000	920
7	PCBs	Aroclor 1016	WB	2	0	18	19	9.3	0.35
7	PCBs	Aroclor 1221	WB	2	0	18	19	9.3	0.35
7	PCBs	Aroclor 1232	WB	2	0	18	19	9.3	0.35
7	PCBs	Aroclor 1242	WB	2	0	18	19	9.3	0.35
7	PCBs	Aroclor 1248	WB	2	0	18	19	9.3	0.35
7	PCBs	Aroclor 1254	WB	2	2	54	98	76	31
7	PCBs	Aroclor 1260	WB	2	2	49	61	55	8.5
7	PCBs	PCB 77	WB	2	2	0.081	0.091	0.086	0.0074
7	PCBs	PCB 105	WB	2	2	2.7	5.3	4.0	1.9
7	PCBs	PCB 114	WB	2	2	0.23	0.51	0.37	0.19
7	PCBs	PCB 118	WB	2	2	5.2	10	7.7	3.5
7	PCBs	PCB 123	WB	2	2	0.081	0.23	0.15	0.10
7	PCBs	PCB 126	WB	2	2	0.0089	0.018	0.013	0.0064
7	PCBs	PCB 156	WB	2	2	1.1	2.3	1.7	0.83
7	PCBs	PCB 157	WB	2	2	0.22	0.45	0.34	0.17
7	PCBs	PCB 167	WB	2	2	0.36	0.67	0.52	0.22
7	PCBs	PCB 169	WB	2	0	0.0024	0.0025	0.0012	0.000064
7	PCBs	PCB 170	WB	2	2	1.9	2.8	2.3	0.63
7	PCBs	PCB 180	WB	2	2	5.0	6.9	6.0	1.4
7	PCBs	PCB 189	WB	2	2	0.059	0.095	0.077	0.026
7	Pesticides	Aldrin	WB	2	0	1.8	1.9	0.93	0.035
7	Pesticides	Alpha-BHC	WB	2	0	1.8	1.9	0.93	0.035
7	Pesticides	Alpha-Chlordene	WB	2	0	1.8	1.9	0.93	0.035
7	Pesticides	Beta-BHC	WB	2	0	1.8	1.9	0.93	0.035

Appendix D-1: Site Summary Statistics
Walleye

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
7	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	2	2	3.5	3.5	3.5	0.00
7	Pesticides	cis-Nonachlor	WB	2	2	3.5	4.3	3.9	0.57
7	Pesticides	DDD-o,p'	WB	2	2	6.6	7.3	7.0	0.49
7	Pesticides	DDE-o,p'	WB	2	2	7.9	12	10.0	2.9
7	Pesticides	DDT-o,p'	WB	2	0	1.8	1.9	0.93	0.035
7	Pesticides	DDD-p,p'	WB	2	2	51	57	54	4.2
7	Pesticides	DDE-p,p'	WB	2	2	440	440	440	0.00
7	Pesticides	DDT-p,p'	WB	2	2	6.6	9.1	7.9	1.8
7	Pesticides	DDMU	WB	2	2	7.9	8.3	8.1	0.28
7	Pesticides	Delta-BHC	WB	2	0	1.8	1.9	0.93	0.035
7	Pesticides	Endosulfan Sulfate	WB	2	0	1.8	1.9	0.93	0.035
7	Pesticides	Gamma-Chlordane	WB	2	2	4.0	4.3	4.2	0.21
7	Pesticides	Gamma-Chlordene	WB	2	0	1.8	1.9	0.93	0.035
7	Pesticides	Heptachlor	WB	2	0	1.8	1.9	0.93	0.035
7	Pesticides	Heptachlor Epoxide	WB	2	0	1.8	1.9	0.93	0.035
7	Pesticides	Hexachlorobenzene	WB	2	2	1.9	3.8	2.9	1.3
7	Pesticides	Lindane	WB	2	0	1.8	1.9	0.93	0.035
7	Pesticides	Mirex	WB	2	2	3.0	4.1	3.6	0.78
7	Pesticides	Oxychlordane	WB	2	2	1.6	2.4	2.0	0.57
7	Pesticides	Pentachloroanisol	WB	2	0	1.8	1.9	0.93	0.035
7	Pesticides	Toxaphene	WB	2	0	55	56	28	0.35
7	Pesticides	trans-Nonachlor	WB	2	2	8.3	8.6	8.5	0.21
7	Semivolatiles	1,2,4-Trichlorobenzene	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	1,2-Diphenylhydrazine	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	2,4-Dinitrotoluene	WB	2	0	19	20	9.8	0.21
7	Semivolatiles	2,6-Dinitrotoluene	WB	2	0	38	40	20	0.42
7	Semivolatiles	2-Chloronaphthalene	WB	2	0	19	20	9.8	0.21
7	Semivolatiles	4-Bromophenyl-Phenylether	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	4-Chlorophenyl-Phenylether	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	Acenaphthene	WB	2	0	19	20	9.8	0.21
7	Semivolatiles	Acenaphthylene	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	Anthracene	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	Benzene, 1,2-dichloro-	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	Benzene, 1,3-dichloro-	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	Benzene, 1,4-dichloro-	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	Benzo(a)anthracene	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	Benzo(a)pyrene	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	Benzo(g,h,i)perylene	WB	2	0	19	20	9.8	0.21
7	Semivolatiles	Benzo[b]Fluoranthene	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	Benzo[k]fluoranthene	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	2	0	19	20	9.8	0.21
7	Semivolatiles	Chrysene	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	Dibenz[a,h]anthracene	WB	2	0	19	20	9.8	0.21
7	Semivolatiles	Dibenzofuran	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	Fluoranthene	WB	2	0	19	20	9.8	0.21
7	Semivolatiles	9H-Fluorene	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	Hexachlorobutadiene	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	Hexachloroethane	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	2	0	19	20	9.8	0.21
7	Semivolatiles	Naphthalene	WB	2	0	20	28	12	2.9
7	Semivolatiles	Naphthalene, 1-methyl-	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	Naphthalene, 2-methyl-	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	Nitrobenzene	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	Phenanthrene	WB	2	0	9.6	9.9	4.9	0.11
7	Semivolatiles	Pyrene	WB	2	0	19	20	9.8	0.21
7	Semivolatiles	Retene	WB	2	0	19	20	9.8	0.21
30	Dioxin/furans	2,3,7,8-TCDD	FS	3	3	0.000070	0.000080	0.000077	0.000058
30	Dioxin/furans	2,3,7,8-TCDD	WB	1	1	0.00038	0.00038	0.00038	na
30	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000010	0.00012	0.000078	0.000064
30	Dioxin/furans	1,2,3,7,8-PeCDD	WB	1	1	0.00027	0.00027	0.00027	na
30	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	3	0.000080	0.000090	0.000087	0.000058
30	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	1	1	0.00013	0.00013	0.00013	na
30	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.000040	0.000050	0.000047	0.000058
30	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	1	1	0.00020	0.00020	0.00020	na
30	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000010	0.000020	0.000015	0.000087
30	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	1	1	0.000080	0.000080	0.000080	na
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000010	0.00010	0.000065	0.000052
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	1	1	0.00028	0.00028	0.00028	na
30	Dioxin/furans	OCDD	FS	3	2	0.000010	0.00016	0.000098	0.000082
30	Dioxin/furans	OCDD	WB	1	1	0.00032	0.00032	0.00032	na
30	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00060	0.00075	0.00067	0.000076
30	Dioxin/furans	2,3,7,8-TCDF	WB	1	1	0.0038	0.0038	0.0038	na
30	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.000030	0.000040	0.000033	0.000058
30	Dioxin/furans	1,2,3,7,8-PeCDF	WB	1	1	0.00014	0.00014	0.00014	na
30	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.000020	0.000040	0.000030	0.000010
30	Dioxin/furans	2,3,4,7,8-PeCDF	WB	1	1	0.00019	0.00019	0.00019	na

Appendix D-1: Site Summary Statistics
Walleye

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	1	1	0.000040	0.000040	0.000040	na
30	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000020	0.000030	0.000023	0.0000058
30	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	1	1	0.000050	0.000050	0.000050	na
30	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	3	0.000050	0.000060	0.000053	0.0000058
30	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	1	1	0.00011	0.00011	0.00011	na
30	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	3	0.00012	0.00013	0.00012	0.0000058
30	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	1	1	0.00016	0.00016	0.00016	na
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000010	0.000070	0.000042	0.000033
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	1	1	0.00011	0.00011	0.00011	na
30	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	1	1	0.000040	0.000040	0.000040	na
30	Dioxin/furans	OCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	OCDF	WB	1	1	0.00010	0.00010	0.00010	na
30	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	520	960	340	120
30	Guaiacols/Phenols	4-Chloroguaiacol	WB	1	0	510	510	250	na
30	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	520	960	340	120
30	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	1	0	510	510	250	na
30	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	520	960	340	120
30	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	1	0	510	510	250	na
30	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	520	960	340	120
30	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	1	0	510	510	250	na
30	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	520	960	340	120
30	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	1	0	510	510	250	na
30	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	210	380	130	50
30	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	1	0	200	200	100	na
30	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	520	960	340	120
30	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	1	0	510	510	250	na
30	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	210	380	130	50
30	Guaiacols/Phenols	Tetrachloroguaiacol	WB	1	0	200	200	100	na
30	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	210	380	130	50
30	Guaiacols/Phenols	2-Chlorophenol	WB	1	0	200	200	100	na
30	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	210	380	130	50
30	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	1	0	200	200	100	na
30	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	210	380	130	50
30	Guaiacols/Phenols	2,4-Dichlorophenol	WB	1	0	200	200	100	na
30	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	520	960	340	120
30	Guaiacols/Phenols	2,4-Dimethylphenol	WB	1	0	510	510	250	na
30	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	210	380	130	50
30	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	1	0	200	200	100	na
30	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	210	380	130	50
30	Guaiacols/Phenols	Pentachlorophenol	WB	1	0	200	200	100	na
30	Guaiacols/Phenols	Phenol	FS	3	0	210	380	130	50
30	Guaiacols/Phenols	Phenol	WB	1	0	200	200	100	na
30	Metals	Aluminum	FS	3	3	2,300	2,700	2,500	200
30	Metals	Aluminum	WB	1	1	6,200	6,200	6,200	na
30	Metals	Antimony	FS	3	0	50	50	25	0.00
30	Metals	Antimony	WB	1	0	50	50	25	na
30	Metals	Arsenic	FS	3	3	290	400	360	64
30	Metals	Arsenic	WB	1	1	480	480	480	na
30	Metals	Barium	FS	3	3	230	240	240	5.8
30	Metals	Barium	WB	1	1	520	520	520	na
30	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
30	Metals	Beryllium	WB	1	0	4.0	4.0	2.0	na
30	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
30	Metals	Cadmium	WB	1	1	7.4	7.4	7.4	na
30	Metals	Chromium	FS	3	2	100	110	90	35
30	Metals	Chromium	WB	1	1	120	120	120	na
30	Metals	Cobalt	FS	3	3	8.0	9.0	8.3	0.58
30	Metals	Cobalt	WB	1	1	19	19	19	na
30	Metals	Copper	FS	3	3	500	620	570	60
30	Metals	Copper	WB	1	1	730	730	730	na
30	Metals	Lead	FS	3	0	10	10	5.0	0.00
30	Metals	Lead	WB	1	0	10	10	5.0	na
30	Metals	Manganese	FS	3	3	350	390	370	18
30	Metals	Manganese	WB	1	1	900	900	900	na
30	Metals	Mercury	FS	3	3	160	200	180	23
30	Metals	Mercury	WB	1	1	120	120	120	na
30	Metals	Nickel	FS	3	3	250	280	260	15
30	Metals	Nickel	WB	1	1	400	400	400	na
30	Metals	Selenium	FS	3	3	380	400	390	10
30	Metals	Selenium	WB	1	1	410	410	410	na
30	Metals	Silver	FS	3	0	100	100	50	0.00
30	Metals	Silver	WB	1	0	100	100	50	na
30	Metals	Thallium	FS	3	1	50	68	39	25
30	Metals	Thallium	WB	1	0	50	50	25	na

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Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
30	Metals	Vanadium	WB	1	1	20	20	20	na
30	Metals	Zinc	FS	3	3	8,500	9,000	8,700	280
30	Metals	Zinc	WB	1	1	13,000	13,000	13,000	na
30	PCBs	Aroclor 1016	FS	3	0	2.0	20	6.8	5.1
30	PCBs	Aroclor 1016	WB	1	0	19	19	9.5	na
30	PCBs	Aroclor 1221	FS	3	0	2.0	20	6.8	5.1
30	PCBs	Aroclor 1221	WB	1	0	19	19	9.5	na
30	PCBs	Aroclor 1232	FS	3	0	2.0	20	6.8	5.1
30	PCBs	Aroclor 1232	WB	1	0	19	19	9.5	na
30	PCBs	Aroclor 1242	FS	3	0	2.0	20	6.8	5.1
30	PCBs	Aroclor 1242	WB	1	0	19	19	9.5	na
30	PCBs	Aroclor 1248	FS	3	0	2.0	20	6.8	5.1
30	PCBs	Aroclor 1248	WB	1	0	19	19	9.5	na
30	PCBs	Aroclor 1254	FS	3	3	12	14	13	1.2
30	PCBs	Aroclor 1254	WB	1	1	71	71	71	na
30	PCBs	Aroclor 1260	FS	3	0	19	20	9.8	0.29
30	PCBs	Aroclor 1260	WB	1	1	47	47	47	na
30	PCBs	PCB 77	FS	3	3	0.012	0.014	0.014	0.0013
30	PCBs	PCB 77	WB	1	1	0.074	0.074	0.074	na
30	PCBs	PCB 105	FS	3	3	0.31	0.38	0.33	0.038
30	PCBs	PCB 105	WB	1	1	1.2	1.2	1.2	na
30	PCBs	PCB 114	FS	3	3	0.025	0.031	0.027	0.0032
30	PCBs	PCB 114	WB	1	1	0.13	0.13	0.13	na
30	PCBs	PCB 118	FS	3	3	0.62	0.74	0.66	0.067
30	PCBs	PCB 118	WB	1	1	2.6	2.6	2.6	na
30	PCBs	PCB 123	FS	3	3	0.012	0.016	0.014	0.0020
30	PCBs	PCB 123	WB	1	1	0.051	0.051	0.051	na
30	PCBs	PCB 126	FS	3	0	0.00067	0.00070	0.00035	0.000087
30	PCBs	PCB 126	WB	1	0	0.0010	0.0010	0.00050	na
30	PCBs	PCB 156	FS	3	3	0.11	0.15	0.12	0.023
30	PCBs	PCB 156	WB	1	1	0.80	0.80	0.80	na
30	PCBs	PCB 157	FS	3	0	0.00073	0.0014	0.00057	0.00018
30	PCBs	PCB 157	WB	1	0	0.0017	0.0017	0.00084	na
30	PCBs	PCB 167	FS	3	3	0.041	0.044	0.043	0.0017
30	PCBs	PCB 167	WB	1	1	0.32	0.32	0.32	na
30	PCBs	PCB 169	FS	3	0	0.00050	0.00075	0.00029	0.000072
30	PCBs	PCB 169	WB	1	0	0.0049	0.0049	0.0025	na
30	PCBs	PCB 170	FS	3	3	0.16	0.29	0.22	0.065
30	PCBs	PCB 170	WB	1	1	0.97	0.97	0.97	na
30	PCBs	PCB 180	FS	3	3	0.47	1.0	0.73	0.27
30	PCBs	PCB 180	WB	1	1	2.8	2.8	2.8	na
30	PCBs	PCB 189	FS	3	3	0.0064	0.0074	0.0068	0.00053
30	PCBs	PCB 189	WB	1	1	0.053	0.053	0.053	na
30	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.98	0.029
30	Pesticides	Aldrin	WB	1	0	1.9	1.9	0.95	na
30	Pesticides	Alpha-BHC	FS	3	0	2.4	2.5	1.2	0.029
30	Pesticides	Alpha-BHC	WB	1	0	2.4	2.4	1.2	na
30	Pesticides	Alpha-Chlordene	FS	3	0	2.4	2.5	1.2	0.029
30	Pesticides	Alpha-Chlordene	WB	1	0	2.4	2.4	1.2	na
30	Pesticides	Beta-BHC	FS	3	0	2.4	2.5	1.2	0.029
30	Pesticides	Beta-BHC	WB	1	0	2.4	2.4	1.2	na
30	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	2.4	2.5	1.2	0.029
30	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	1	1	5.8	5.8	5.8	na
30	Pesticides	cis-Nonachlor	FS	3	0	2.4	2.5	1.2	0.029
30	Pesticides	cis-Nonachlor	WB	1	0	2.4	2.4	1.2	na
30	Pesticides	DDD-o,p'	FS	3	0	2.4	2.5	1.2	0.029
30	Pesticides	DDD-o,p'	WB	1	1	5.8	5.8	5.8	na
30	Pesticides	DDE-o,p'	FS	3	0	2.4	2.8	1.3	0.10
30	Pesticides	DDE-o,p'	WB	1	1	6.8	6.8	6.8	na
30	Pesticides	DDT-o,p'	FS	3	0	2.4	2.5	1.2	0.029
30	Pesticides	DDT-o,p'	WB	1	0	2.4	2.4	1.2	na
30	Pesticides	DDD-p,p'	FS	3	3	6.3	7.1	6.7	0.40
30	Pesticides	DDD-p,p'	WB	1	1	50	50	50	na
30	Pesticides	DDE-p,p'	FS	3	3	44	52	47	4.4
30	Pesticides	DDE-p,p'	WB	1	1	350	350	350	na
30	Pesticides	DDT-p,p'	FS	3	2	2.0	2.7	2.0	0.73
30	Pesticides	DDT-p,p'	WB	1	1	12	12	12	na
30	Pesticides	Delta-BHC	FS	3	0	2.4	2.5	1.2	0.029
30	Pesticides	Delta-BHC	WB	1	0	2.4	2.4	1.2	na
30	Pesticides	Endosulfan Sulfate	FS	3	0	2.4	2.5	1.2	0.029
30	Pesticides	Endosulfan Sulfate	WB	1	0	2.4	2.4	1.2	na
30	Pesticides	Gamma-Chlordane	FS	3	0	2.4	2.5	1.2	0.029
30	Pesticides	Gamma-Chlordane	WB	1	1	3.6	3.6	3.6	na
30	Pesticides	Gamma-Chlordene	FS	3	0	2.4	2.5	1.2	0.029
30	Pesticides	Gamma-Chlordene	WB	1	0	2.4	2.4	1.2	na

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Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.98	0.029
30	Pesticides	Heptachlor	WB	1	0	1.9	1.9	0.95	na
30	Pesticides	Heptachlor Epoxide	FS	3	0	2.4	2.5	1.2	0.029
30	Pesticides	Heptachlor Epoxide	WB	1	0	2.4	2.4	1.2	na
30	Pesticides	Hexachlorobenzene	FS	3	0	2.4	2.5	1.2	0.029
30	Pesticides	Hexachlorobenzene	WB	1	0	2.4	2.4	1.2	na
30	Pesticides	Lindane	FS	3	0	2.4	2.5	1.2	0.029
30	Pesticides	Lindane	WB	1	0	2.4	2.4	1.2	na
30	Pesticides	Mirex	FS	3	0	2.4	2.5	1.2	0.029
30	Pesticides	Mirex	WB	1	0	2.4	2.4	1.2	na
30	Pesticides	Oxychlordan	FS	3	0	2.4	2.5	1.2	0.029
30	Pesticides	Oxychlordan	WB	1	1	1.7	1.7	1.7	na
30	Pesticides	Pentachloroanisol	FS	3	0	2.4	2.5	1.2	0.029
30	Pesticides	Pentachloroanisol	WB	1	1	1.2	1.2	1.2	na
30	Pesticides	Toxaphene	FS	3	0	73	74	37	0.29
30	Pesticides	Toxaphene	WB	1	0	72	72	36	na
30	Pesticides	trans-Nonachlor	FS	3	0	2.4	2.5	1.2	0.029
30	Pesticides	trans-Nonachlor	WB	1	1	3.0	3.0	3.0	na
30	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	1,2,4-Trichlorobenzene	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	1,2-Diphenylhydrazine	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	10	19	6.7	2.5
30	Semivolatiles	2,4-Dinitrotoluene	WB	1	0	10	10	5.1	na
30	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	21	38	13	5.0
30	Semivolatiles	2,6-Dinitrotoluene	WB	1	0	20	20	10	na
30	Semivolatiles	2-Chloronaphthalene	FS	3	0	10	19	6.7	2.5
30	Semivolatiles	2-Chloronaphthalene	WB	1	0	10	10	5.1	na
30	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	4-Bromophenyl-Phenylether	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	4-Chlorophenyl-Phenylether	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	Acenaphthene	FS	3	0	10	19	6.7	2.5
30	Semivolatiles	Acenaphthene	WB	1	0	10	10	5.1	na
30	Semivolatiles	Acenaphthylene	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	Acenaphthylene	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	Anthracene	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	Anthracene	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	Benzene, 1,2-dichloro-	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	Benzene, 1,3-dichloro-	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	Benzene, 1,4-dichloro-	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	Benzo(a)anthracene	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	Benzo(a)anthracene	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	Benzo(a)pyrene	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	Benzo(a)pyrene	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	10	19	6.7	2.5
30	Semivolatiles	Benzo(g,h,i)perylene	WB	1	0	10	10	5.1	na
30	Semivolatiles	Benzo[b]fluoranthene	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	Benzo[b]fluoranthene	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	Benzo[k]fluoranthene	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	10	19	6.7	2.5
30	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	1	0	10	10	5.1	na
30	Semivolatiles	Chrysene	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	Chrysene	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	10	19	6.7	2.5
30	Semivolatiles	Dibenz[a,h]anthracene	WB	1	0	10	10	5.1	na
30	Semivolatiles	Dibenzofuran	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	Dibenzofuran	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	Fluoranthene	FS	3	0	10	19	6.7	2.5
30	Semivolatiles	Fluoranthene	WB	1	0	10	10	5.1	na
30	Semivolatiles	9H-Fluorene	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	9H-Fluorene	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	Hexachlorobutadiene	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	Hexachlorobutadiene	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	Hexachloroethane	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	Hexachloroethane	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	10	19	6.7	2.5
30	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	1	0	10	10	5.1	na
30	Semivolatiles	Naphthalene	FS	3	0	5.3	13	4.7	1.9
30	Semivolatiles	Naphthalene	WB	1	0	16	16	8.0	na
30	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	Naphthalene, 1-methyl-	WB	1	1	7.7	7.7	7.7	na

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Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Semivolatiles	Naphthalene, 2-methyl-	FS	3	2	6.0	9.6	6.1	1.4
30	Semivolatiles	Naphthalene, 2-methyl-	WB	1	1	16	16	16	na
30	Semivolatiles	Nitrobenzene	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	Nitrobenzene	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	Phenanthrene	FS	3	0	5.2	9.6	3.4	1.3
30	Semivolatiles	Phenanthrene	WB	1	0	5.0	5.0	2.5	na
30	Semivolatiles	Pyrene	FS	3	0	10	19	6.7	2.5
30	Semivolatiles	Pyrene	WB	1	0	10	10	5.1	na
30	Semivolatiles	Retene	FS	3	0	10	19	6.7	2.5
30	Semivolatiles	Retene	WB	1	0	10	10	5.1	na

Appendix D-1: Site Summary Statistics
Rainbow Trout

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
49	Dioxin/furans	2,3,7,8-TCDD	FS	3	3	0.000090	0.00015	0.00012	0.000031
49	Dioxin/furans	2,3,7,8-TCDD	WB	3	3	0.00014	0.00020	0.00017	0.000031
49	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000010	0.00033	0.00018	0.00016
49	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.00021	0.00026	0.00023	0.000026
49	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	3	0.00011	0.00027	0.00017	0.000090
49	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	3	0.00012	0.00014	0.00013	0.000010
49	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	2	0.000020	0.00012	0.000077	0.000059
49	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000010	0.00021	0.00013	0.00011
49	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000010	0.00032	0.00012	0.00017
49	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000010	0.000060	0.000038	0.000029
49	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.00016	0.00044	0.00026	0.00015
49	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00024	0.00028	0.00026	0.000021
49	Dioxin/furans	OCDD	FS	3	3	0.00019	0.0014	0.00060	0.00069
49	Dioxin/furans	OCDD	WB	3	3	0.00036	0.00048	0.00041	0.000064
49	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00014	0.00017	0.00015	0.000015
49	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00024	0.00036	0.00029	0.000062
49	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.000040	0.00018	0.000087	0.000081
49	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	2	0.000010	0.000080	0.000045	0.000038
49	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	2	0.000020	0.000050	0.000033	0.000021
49	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.000070	0.00010	0.000083	0.000015
49	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	3	0.000020	0.00018	0.000073	0.000092
49	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	2	0.000010	0.000040	0.000025	0.000018
49	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	2	0.000010	0.00021	0.000085	0.00011
49	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	3	0.000040	0.000060	0.000047	0.000012
49	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	2	0.000010	0.00038	0.00016	0.00020
49	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	3	0.000070	0.000090	0.000080	0.000010
49	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	3	0.00015	0.00036	0.00022	0.00012
49	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00016	0.00021	0.00018	0.000029
49	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	3	0.000080	0.00035	0.00017	0.00015
49	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000030	0.000080	0.000058	0.000038
49	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	1	0.000020	0.00034	0.00012	0.00019
49	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
49	Dioxin/furans	OCDF	FS	3	3	0.000050	0.00091	0.00035	0.00049
49	Dioxin/furans	OCDF	WB	3	1	0.000010	0.000070	0.000027	0.000038
49	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	400	480	220	21
49	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	420	530	240	31
49	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	400	480	220	21
49	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	420	530	240	31
49	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	400	480	220	21
49	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	420	530	240	31
49	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	400	480	220	21
49	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	420	530	240	31
49	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	400	480	220	21
49	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	420	530	240	31
49	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	160	190	89	8.3
49	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	170	210	97	12
49	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	400	480	220	21
49	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	420	530	240	31
49	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	160	190	89	8.3
49	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	170	210	97	12
49	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	160	190	89	8.3
49	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	170	210	97	12
49	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	160	190	89	8.3
49	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	170	210	97	12
49	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	160	190	89	8.3
49	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	170	210	97	12
49	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	400	480	220	21
49	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	420	530	240	31
49	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	160	190	89	8.3
49	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	170	210	97	12
49	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	160	190	89	8.3
49	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	170	210	97	12
49	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	160	190	89	8.3
49	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	170	210	97	12
49	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	160	190	89	8.3
49	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	170	210	97	12
49	Guaiacols/Phenols	Phenol	FS	3	0	160	190	89	8.3
49	Guaiacols/Phenols	Phenol	WB	3	0	170	210	97	12
49	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
49	Metals	Aluminum	WB	3	3	4,400	14,000	9,000	4,700
49	Metals	Antimony	FS	3	0	50	50	25	0.00
49	Metals	Antimony	WB	3	0	50	50	25	0.00
49	Metals	Arsenic	FS	3	0	50	50	25	0.00
49	Metals	Arsenic	WB	3	0	50	50	25	0.00
49	Metals	Barium	FS	3	1	200	260	150	92
49	Metals	Barium	WB	3	3	620	1,100	830	240

Appendix D-1: Site Summary Statistics
Rainbow Trout

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
49	Metals	Beryllium	FS	3	2	4.0	6.7	4.6	2.4
49	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
49	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
49	Metals	Cadmium	WB	3	1	4.0	4.6	2.9	1.5
49	Metals	Chromium	FS	3	0	100	100	50	0.00
49	Metals	Chromium	WB	3	1	100	120	73	40
49	Metals	Cobalt	FS	3	3	15	23	19	4.0
49	Metals	Cobalt	WB	3	3	48	72	60	12
49	Metals	Copper	FS	3	3	440	510	480	35
49	Metals	Copper	WB	3	3	980	1,200	1,100	110
49	Metals	Lead	FS	3	0	10	10	5.0	0.00
49	Metals	Lead	WB	3	2	10	60	26	30
49	Metals	Manganese	FS	3	3	410	600	520	97
49	Metals	Manganese	WB	3	3	3,200	4,100	3,600	500
49	Metals	Mercury	FS	3	3	67	74	69	4.0
49	Metals	Mercury	WB	3	2	42	61	46	22
49	Metals	Nickel	FS	3	3	61	76	67	7.9
49	Metals	Nickel	WB	3	3	150	340	230	97
49	Metals	Selenium	FS	3	3	220	250	240	15
49	Metals	Selenium	WB	3	3	300	340	320	20
49	Metals	Silver	FS	3	0	100	100	50	0.00
49	Metals	Silver	WB	3	0	100	100	50	0.00
49	Metals	Thallium	FS	3	0	50	50	25	0.00
49	Metals	Thallium	WB	3	0	50	50	25	0.00
49	Metals	Vanadium	FS	3	2	10	17	13	6.7
49	Metals	Vanadium	WB	3	3	52	140	84	49
49	Metals	Zinc	FS	3	3	8,300	8,900	8,500	310
49	Metals	Zinc	WB	3	3	23,000	27,000	25,000	1,900
49	PCBs	Aroclor 1016	FS	3	0	19	19	9.5	0.00
49	PCBs	Aroclor 1016	WB	3	0	19	22	10	0.76
49	PCBs	Aroclor 1221	FS	3	0	19	19	9.5	0.00
49	PCBs	Aroclor 1221	WB	3	0	19	22	10	0.76
49	PCBs	Aroclor 1232	FS	3	0	19	19	9.5	0.00
49	PCBs	Aroclor 1232	WB	3	0	19	22	10	0.76
49	PCBs	Aroclor 1242	FS	3	0	19	19	9.5	0.00
49	PCBs	Aroclor 1242	WB	3	0	19	22	10	0.76
49	PCBs	Aroclor 1248	FS	3	0	19	19	9.5	0.00
49	PCBs	Aroclor 1248	WB	3	0	19	22	10	0.76
49	PCBs	Aroclor 1254	FS	3	3	10	14	12	2.1
49	PCBs	Aroclor 1254	WB	3	3	12	17	14	2.5
49	PCBs	Aroclor 1260	FS	3	0	19	19	9.5	0.00
49	PCBs	Aroclor 1260	WB	3	0	19	22	10	0.76
49	PCBs	PCB 77	FS	3	3	0.0091	0.010	0.0095	0.00047
49	PCBs	PCB 77	WB	3	3	0.014	0.021	0.017	0.0032
49	PCBs	PCB 105	FS	3	3	0.40	0.46	0.43	0.031
49	PCBs	PCB 105	WB	3	3	0.56	0.65	0.60	0.049
49	PCBs	PCB 114	FS	3	3	0.032	0.036	0.034	0.0018
49	PCBs	PCB 114	WB	3	3	0.046	0.055	0.050	0.0048
49	PCBs	PCB 118	FS	3	3	0.89	1.0	0.94	0.068
49	PCBs	PCB 118	WB	3	3	1.3	1.5	1.3	0.12
49	PCBs	PCB 123	FS	3	3	0.015	0.016	0.016	0.00020
49	PCBs	PCB 123	WB	3	3	0.021	0.024	0.022	0.0017
49	PCBs	PCB 126	FS	3	3	0.0021	0.0023	0.0022	0.000070
49	PCBs	PCB 126	WB	3	3	0.0031	0.0032	0.0031	0.000084
49	PCBs	PCB 156	FS	3	3	0.18	0.20	0.19	0.010
49	PCBs	PCB 156	WB	3	3	0.26	0.29	0.27	0.014
49	PCBs	PCB 157	FS	3	3	0.037	0.042	0.039	0.0026
49	PCBs	PCB 157	WB	3	3	0.053	0.058	0.055	0.0026
49	PCBs	PCB 167	FS	3	3	0.069	0.079	0.073	0.0049
49	PCBs	PCB 167	WB	3	3	0.10	0.11	0.11	0.0059
49	PCBs	PCB 169	FS	3	0	0.00063	0.00072	0.00034	0.000023
49	PCBs	PCB 169	WB	3	0	0.00050	0.00093	0.00036	0.00011
49	PCBs	PCB 170	FS	3	3	0.19	0.22	0.21	0.015
49	PCBs	PCB 170	WB	3	3	0.27	0.29	0.28	0.0095
49	PCBs	PCB 180	FS	3	3	0.55	0.64	0.59	0.043
49	PCBs	PCB 180	WB	3	3	0.78	0.85	0.81	0.034
49	PCBs	PCB 189	FS	3	3	0.0075	0.0086	0.0080	0.00058
49	PCBs	PCB 189	WB	3	3	0.011	0.012	0.011	0.000058
49	Pesticides	Aldrin	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	Aldrin	WB	3	0	2.4	5.4	1.7	0.84
49	Pesticides	Alpha-BHC	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	Alpha-BHC	WB	3	0	2.4	5.4	1.7	0.84
49	Pesticides	Alpha-Chlordene	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	Alpha-Chlordene	WB	3	0	2.4	5.4	1.7	0.84
49	Pesticides	Beta-BHC	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	Beta-BHC	WB	3	0	2.4	5.4	1.7	0.84

Appendix D-1: Site Summary Statistics
Rainbow Trout

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
49	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	2.4	5.4	1.7	0.84
49	Pesticides	cis-Nonachlor	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	cis-Nonachlor	WB	3	0	2.4	5.4	1.7	0.84
49	Pesticides	DDD-o,p'	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	DDD-o,p'	WB	3	0	2.4	5.4	1.7	0.84
49	Pesticides	DDE-o,p'	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	DDE-o,p'	WB	3	0	2.4	5.4	1.7	0.84
49	Pesticides	DDT-o,p'	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	DDT-o,p'	WB	3	0	2.4	5.4	1.7	0.84
49	Pesticides	DDD-p,p'	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	DDD-p,p'	WB	3	2	1.7	5.4	2.1	0.53
49	Pesticides	DDE-p,p'	FS	3	3	38	54	45	8.3
49	Pesticides	DDE-p,p'	WB	3	3	73	84	78	5.7
49	Pesticides	DDT-p,p'	FS	3	3	2.9	5.1	3.8	1.2
49	Pesticides	DDT-p,p'	WB	3	3	9.7	12	11	1.3
49	Pesticides	DDMU	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	DDMU	WB	3	0	2.4	5.4	1.7	0.84
49	Pesticides	Delta-BHC	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	Delta-BHC	WB	3	0	2.4	5.4	1.7	0.84
49	Pesticides	Endosulfan Sulfate	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	Endosulfan Sulfate	WB	3	0	2.4	5.4	1.7	0.84
49	Pesticides	Gamma-Chlordane	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	Gamma-Chlordane	WB	3	0	2.4	5.4	1.7	0.84
49	Pesticides	Gamma-Chlordene	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	Gamma-Chlordene	WB	3	0	2.4	5.4	1.7	0.84
49	Pesticides	Heptachlor	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	Heptachlor	WB	3	0	2.4	5.4	1.7	0.84
49	Pesticides	Heptachlor Epoxide	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	Heptachlor Epoxide	WB	3	0	2.4	5.4	1.7	0.84
49	Pesticides	Hexachlorobenzene	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	Hexachlorobenzene	WB	3	0	2.4	5.4	1.7	0.84
49	Pesticides	Lindane	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	Lindane	WB	3	0	2.4	5.4	1.7	0.84
49	Pesticides	Mirex	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	Mirex	WB	3	0	2.4	5.4	1.7	0.84
49	Pesticides	Oxychlordane	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	Oxychlordane	WB	3	0	2.4	5.4	1.7	0.84
49	Pesticides	Pentachloroanisol	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	Pentachloroanisol	WB	3	2	0.80	5.4	1.5	1.1
49	Pesticides	Toxaphene	FS	3	0	57	57	29	0.00
49	Pesticides	Toxaphene	WB	3	0	57	66	31	2.3
49	Pesticides	trans-Nonachlor	FS	3	0	2.4	2.4	1.2	2.1E-08
49	Pesticides	trans-Nonachlor	WB	3	0	2.4	5.4	1.7	0.84
49	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	21	27	12	1.6
49	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	21	27	12	1.6
49	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	7.9	9.5	4.4	0.42
49	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	41	53	24	3.1
49	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	16	19	8.9	0.83
49	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	83	110	49	6.3
49	Semivolatiles	2-Chloronaphthalene	FS	3	0	7.9	9.5	4.4	0.42
49	Semivolatiles	2-Chloronaphthalene	WB	3	0	41	53	24	3.1
49	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	21	27	12	1.6
49	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	21	27	12	1.6
49	Semivolatiles	Acenaphthene	FS	3	0	7.9	9.5	4.4	0.42
49	Semivolatiles	Acenaphthene	WB	3	0	41	53	24	3.1
49	Semivolatiles	Acenaphthylene	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	Acenaphthylene	WB	3	0	21	27	12	1.6
49	Semivolatiles	Anthracene	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	Anthracene	WB	3	1	5.5	27	11	4.4
49	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	21	27	12	1.6
49	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	21	27	12	1.6
49	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	21	27	12	1.6
49	Semivolatiles	Benzo(a)anthracene	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	Benzo(a)anthracene	WB	3	0	21	27	12	1.6
49	Semivolatiles	Benzo(a)pyrene	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	Benzo(a)pyrene	WB	3	0	21	27	12	1.6
49	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	7.9	9.5	4.4	0.42
49	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	41	53	24	3.1

Appendix D-1: Site Summary Statistics
Rainbow Trout

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
49	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	21	27	12	1.6
49	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	21	27	12	1.6
49	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	7.9	9.5	4.4	0.42
49	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	41	53	24	3.1
49	Semivolatiles	Chrysene	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	Chrysene	WB	3	0	21	27	12	1.6
49	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	7.9	9.5	4.4	0.42
49	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	41	53	24	3.1
49	Semivolatiles	Dibenzofuran	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	Dibenzofuran	WB	3	0	21	27	12	1.6
49	Semivolatiles	Fluoranthene	FS	3	0	7.9	9.5	4.4	0.42
49	Semivolatiles	Fluoranthene	WB	3	1	34	53	29	4.8
49	Semivolatiles	9H-Fluorene	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	9H-Fluorene	WB	3	0	21	27	12	1.6
49	Semivolatiles	Hexachlorobutadiene	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	Hexachlorobutadiene	WB	3	0	21	27	12	1.6
49	Semivolatiles	Hexachloroethane	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	Hexachloroethane	WB	3	0	21	27	12	1.6
49	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	7.9	9.5	4.4	0.42
49	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	41	53	24	3.1
49	Semivolatiles	Naphthalene	FS	3	0	5.9	14	4.4	2.1
49	Semivolatiles	Naphthalene	WB	3	0	21	27	12	1.6
49	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	4.1	4.8	2.2	0.18
49	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	21	27	12	1.6
49	Semivolatiles	Naphthalene, 2-methyl-	FS	3	3	6.8	11	8.4	2.4
49	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	21	27	12	1.6
49	Semivolatiles	Nitrobenzene	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	Nitrobenzene	WB	3	0	21	27	12	1.6
49	Semivolatiles	Phenanthrene	FS	3	0	4.0	4.8	2.2	0.20
49	Semivolatiles	Phenanthrene	WB	3	1	26	50	25	21
49	Semivolatiles	Pyrene	FS	3	0	7.9	9.5	4.4	0.42
49	Semivolatiles	Pyrene	WB	3	1	51	450	170	240
49	Semivolatiles	Retene	FS	3	0	7.9	9.5	4.4	0.42
49	Semivolatiles	Retene	WB	3	0	41	53	24	3.1
56	Dioxin/furans	2,3,7,8-TCDD	WB	2	1	0.000020	0.00010	0.000055	0.000064
56	Dioxin/furans	1,2,3,7,8-PeCDD	WB	2	0	0.000040	0.000050	0.000023	0.000035
56	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	2	0	0.000020	0.000030	0.000013	0.000035
56	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	2	1	0.000020	0.000070	0.000040	0.000042
56	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	2	1	0.000030	0.000050	0.000033	0.000025
56	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	2	1	0.000020	0.00016	0.000085	0.00011
56	Dioxin/furans	OCDD	WB	2	2	0.00071	0.0030	0.0018	0.0016
56	Dioxin/furans	2,3,7,8-TCDF	WB	2	1	0.000040	0.00028	0.00015	0.00018
56	Dioxin/furans	1,2,3,7,8-PeCDF	WB	2	0	0.000030	0.000030	0.000015	0.00
56	Dioxin/furans	2,3,4,7,8-PeCDF	WB	2	0	0.000030	0.000030	0.000015	0.00
56	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	2	0	0.000010	0.000030	0.000010	0.000071
56	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	2	0	0.000010	0.000030	0.000010	0.000071
56	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	2	0	0.000010	0.000030	0.000010	0.000071
56	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	2	0	0.000010	0.000030	0.000010	0.000071
56	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	2	0	0.000020	0.000030	0.000013	0.000035
56	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	2	0	0.000020	0.000030	0.000013	0.000035
56	Dioxin/furans	OCDF	WB	2	0	0.000060	0.000060	0.000030	0.00
56	Guaiacols/Phenols	4-Chloroguaiacol	WB	2	0	800	980	450	65
56	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	2	0	800	980	450	65
56	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	2	0	800	980	450	65
56	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	2	0	800	980	450	65
56	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	2	0	800	980	450	65
56	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	2	0	320	390	180	26
56	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	2	0	800	980	450	65
56	Guaiacols/Phenols	Tetrachloroguaiacol	WB	2	0	320	390	180	26
56	Guaiacols/Phenols	2-Chlorophenol	WB	2	0	320	390	180	26
56	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	2	0	320	390	180	26
56	Guaiacols/Phenols	2,4-Dichlorophenol	WB	2	0	320	390	180	26
56	Guaiacols/Phenols	2,4-Dimethylphenol	WB	2	0	800	980	450	65
56	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	2	0	320	390	180	26
56	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	2	0	320	390	180	26
56	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	2	0	320	390	180	26
56	Guaiacols/Phenols	Pentachlorophenol	WB	2	0	320	390	180	26
56	Guaiacols/Phenols	Phenol	WB	2	0	320	390	180	26
56	Metals	Aluminum	WB	2	2	10,000	10,000	10,000	71
56	Metals	Antimony	WB	2	0	50	50	25	0.00
56	Metals	Arsenic	WB	2	2	410	560	490	110
56	Metals	Barium	WB	2	2	220	420	320	140
56	Metals	Beryllium	WB	2	0	4.0	4.0	2.0	0.00
56	Metals	Cadmium	WB	2	2	7.1	13	10	4.2

Appendix D-1: Site Summary Statistics
Rainbow Trout

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
56	Metals	Chromium	WB	2	1	100	110	80	42
56	Metals	Cobalt	WB	2	2	65	83	74	13
56	Metals	Copper	WB	2	2	1,500	2,100	1,800	430
56	Metals	Lead	WB	2	2	14	16	15	1.4
56	Metals	Manganese	WB	2	2	1,700	2,600	2,100	670
56	Metals	Mercury	WB	2	2	60	98	79	27
56	Metals	Nickel	WB	2	2	64	290	180	160
56	Metals	Selenium	WB	2	2	400	790	600	280
56	Metals	Silver	WB	2	0	100	100	50	0.00
56	Metals	Thallium	WB	2	0	50	50	25	0.00
56	Metals	Vanadium	WB	2	2	49	88	69	28
56	Metals	Zinc	WB	2	2	23,000	32,000	27,000	6,600
56	PCBs	Aroclor 1016	WB	2	0	19	20	9.8	0.35
56	PCBs	Aroclor 1221	WB	2	0	19	20	9.8	0.35
56	PCBs	Aroclor 1232	WB	2	0	19	20	9.8	0.35
56	PCBs	Aroclor 1242	WB	2	0	19	20	9.8	0.35
56	PCBs	Aroclor 1248	WB	2	0	19	20	9.8	0.35
56	PCBs	Aroclor 1254	WB	2	2	6.9	17	12	7.1
56	PCBs	Aroclor 1260	WB	2	0	19	20	9.8	0.35
56	PCBs	PCB 77	WB	2	2	0.0036	0.013	0.0082	0.0066
56	PCBs	PCB 105	WB	2	2	0.079	0.21	0.14	0.090
56	PCBs	PCB 114	WB	2	2	0.0066	0.016	0.011	0.0064
56	PCBs	PCB 118	WB	2	2	0.15	0.45	0.30	0.21
56	PCBs	PCB 123	WB	2	2	0.0027	0.0090	0.0059	0.0045
56	PCBs	PCB 126	WB	2	1	0.00050	0.0027	0.0015	0.0017
56	PCBs	PCB 156	WB	2	2	0.016	0.060	0.038	0.031
56	PCBs	PCB 157	WB	2	2	0.0047	0.017	0.011	0.0086
56	PCBs	PCB 167	WB	2	2	0.012	0.039	0.026	0.019
56	PCBs	PCB 169	WB	2	0	0.0010	0.0010	0.00050	0.00
56	PCBs	PCB 170	WB	2	2	0.049	0.19	0.12	0.099
56	PCBs	PCB 180	WB	2	2	0.17	0.56	0.36	0.28
56	PCBs	PCB 189	WB	2	2	0.0025	0.0075	0.0050	0.0035
56	Pesticides	Aldrin	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	Alpha-BHC	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	Alpha-Chlordene	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	Beta-BHC	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	cis-Nonachlor	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	DDD-o,p'	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	DDE-o,p'	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	DDT-o,p'	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	DDD-p,p'	WB	2	1	1.8	2.0	1.4	0.57
56	Pesticides	DDE-p,p'	WB	2	2	2.9	11	7.0	5.7
56	Pesticides	DDT-p,p'	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	DDMU	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	Delta-BHC	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	Endosulfan Sulfate	WB	2	0	0.00	0.00	0.00	na
56	Pesticides	Gamma-Chlordane	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	Gamma-Chlordene	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	Heptachlor	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	Heptachlor Epoxide	WB	2	0	0.00	0.00	0.00	na
56	Pesticides	Hexachlorobenzene	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	Lindane	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	Mirex	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	Oxychlordane	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	Pentachloroanisol	WB	2	0	1.9	2.0	0.98	0.035
56	Pesticides	Toxaphene	WB	2	0	58	60	30	0.71
56	Pesticides	trans-Nonachlor	WB	2	0	1.9	2.0	0.98	0.035
56	Semivolatiles	1,2,4-Trichlorobenzene	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	1,2-Diphenylhydrazine	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	2,4-Dinitrotoluene	WB	2	0	16	20	8.9	1.3
56	Semivolatiles	2,6-Dinitrotoluene	WB	2	0	32	39	18	2.6
56	Semivolatiles	2-Chloronaphthalene	WB	2	0	16	20	8.9	1.3
56	Semivolatiles	4-Bromophenyl-Phenylether	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	4-Chlorophenyl-Phenylether	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	Acenaphthene	WB	2	0	16	20	8.9	1.3
56	Semivolatiles	Acenaphthylene	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	Anthracene	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	Benzene, 1,2-dichloro-	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	Benzene, 1,3-dichloro-	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	Benzene, 1,4-dichloro-	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	Benzo(a)anthracene	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	Benzo(a)pyrene	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	Benzo(g,h,i)perylene	WB	2	0	16	20	8.9	1.3
56	Semivolatiles	Benzo[b]Fluoranthene	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	Benzo[k]fluoranthene	WB	2	0	8.0	9.8	4.5	0.64

Appendix D-1: Site Summary Statistics
Rainbow Trout

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
56	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	2	0	16	20	8.9	1.3
56	Semivolatiles	Chrysene	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	Dibenz[a,h]anthracene	WB	2	0	16	20	8.9	1.3
56	Semivolatiles	Dibenzofuran	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	Fluoranthene	WB	2	0	16	20	8.9	1.3
56	Semivolatiles	9H-Fluorene	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	Hexachlorobutadiene	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	Hexachloroethane	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	2	0	16	20	8.9	1.3
56	Semivolatiles	Naphthalene	WB	2	0	19	30	12	3.9
56	Semivolatiles	Naphthalene, 1-methyl-	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	Naphthalene, 2-methyl-	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	Nitrobenzene	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	Phenanthrene	WB	2	0	8.0	9.8	4.5	0.64
56	Semivolatiles	Pyrene	WB	2	0	16	20	8.9	1.3
56	Semivolatiles	Retene	WB	2	0	16	20	8.9	1.3
98	Dioxin/furans	2,3,7,8-TCDD	FS	4	1	0.000010	0.000060	0.000025	0.000026
98	Dioxin/furans	2,3,7,8-TCDD	WB	3	3	0.000060	0.000070	0.000067	0.000058
98	Dioxin/furans	1,2,3,7,8-PeCDD	FS	4	3	0.000020	0.00019	0.00013	0.000081
98	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	2	0.000050	0.00022	0.00015	0.00011
98	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	4	3	0.000010	0.00013	0.000084	0.000054
98	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	2	0.00010	0.00012	0.000093	0.000038
98	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	4	3	0.000050	0.00021	0.00014	0.000080
98	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.00010	0.00026	0.00017	0.00011
98	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	4	4	0.000040	0.000070	0.000055	0.000013
98	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000070	0.00010	0.000073	0.000025
98	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	4	4	0.00019	0.00030	0.00024	0.000058
98	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00022	0.00032	0.00028	0.000055
98	Dioxin/furans	OCDD	FS	4	3	0.000090	0.00069	0.00034	0.00027
98	Dioxin/furans	OCDD	WB	3	3	0.00034	0.00052	0.00043	0.000090
98	Dioxin/furans	2,3,7,8-TCDF	FS	4	4	0.00024	0.00028	0.00026	0.000017
98	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00033	0.00048	0.00041	0.000075
98	Dioxin/furans	1,2,3,7,8-PeCDF	FS	4	3	0.000010	0.000060	0.000036	0.000023
98	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.000060	0.000090	0.000077	0.000015
98	Dioxin/furans	2,3,4,7,8-PeCDF	FS	4	3	0.000010	0.000070	0.000049	0.000030
98	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	2	0.000050	0.00012	0.000082	0.000050
98	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	4	1	0.000010	0.000050	0.000014	0.000010
98	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	1	0.000010	0.00012	0.000035	0.000028
98	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	4	1	0.000010	0.000050	0.000019	0.000017
98	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	2	0.000040	0.00012	0.000050	0.000010
98	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	4	2	0.000010	0.000060	0.000038	0.000027
98	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	2	0.000080	0.00012	0.000077	0.000015
98	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	4	4	0.00014	0.00019	0.00015	0.000025
98	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	2	0.00012	0.00016	0.00012	0.000051
98	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	4	3	0.000070	0.00015	0.000084	0.000048
98	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000070	0.000090	0.000065	0.000018
98	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	4	0	0.000010	0.000070	0.000015	0.000014
98	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	1	0.000010	0.000090	0.000027	0.000020
98	Dioxin/furans	OCDF	FS	4	3	0.000030	0.000060	0.000039	0.000015
98	Dioxin/furans	OCDF	WB	3	2	0.000030	0.00010	0.000043	0.000012
98	Guaiacols/Phenols	4-Chloroguaiacol	FS	4	0	480	510	240	6.3
98	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	490	500	250	2.9
98	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	4	0	480	510	240	6.3
98	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	490	500	250	2.9
98	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	4	0	480	510	240	6.3
98	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	490	500	250	2.9
98	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	4	0	480	510	240	6.3
98	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	490	500	250	2.9
98	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	4	0	480	510	240	6.3
98	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	490	500	250	2.9
98	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	4	0	190	200	97	2.5
98	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	200	200	99	1.2
98	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	4	0	480	510	240	6.3
98	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	490	500	250	2.9
98	Guaiacols/Phenols	Tetrachloroguaiacol	FS	4	0	190	200	97	2.5
98	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	200	200	99	1.2
98	Guaiacols/Phenols	2-Chlorophenol	FS	4	0	190	200	97	2.5
98	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	200	200	99	1.2
98	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	4	0	190	200	97	2.5
98	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	200	200	99	1.2
98	Guaiacols/Phenols	2,4-Dichlorophenol	FS	4	0	190	200	97	2.5
98	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	200	200	99	1.2
98	Guaiacols/Phenols	2,4-Dimethylphenol	FS	4	0	480	510	240	6.3
98	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	490	500	250	2.9
98	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	4	0	190	200	97	2.5
98	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	2	0	200	200	100	0.00

Appendix D-1: Site Summary Statistics
Rainbow Trout

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
98	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	4	0	190	200	97	2.5
98	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	200	200	99	1.2
98	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	4	0	190	200	97	2.5
98	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	2	0	200	200	100	0.00
98	Guaiacols/Phenols	Pentachlorophenol	FS	4	0	190	200	97	2.5
98	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	200	200	99	1.2
98	Guaiacols/Phenols	Phenol	FS	4	0	190	200	97	2.5
98	Guaiacols/Phenols	Phenol	WB	3	0	200	300	120	29
98	Metals	Aluminum	FS	4	3	1,000	5,000	1,500	690
98	Metals	Aluminum	WB	3	1	5,000	20,000	6,600	3,800
98	Metals	Antimony	FS	4	0	50	50	25	0.00
98	Metals	Antimony	WB	3	0	50	50	25	0.00
98	Metals	Arsenic	FS	4	0	50	50	25	0.00
98	Metals	Arsenic	WB	3	0	50	50	25	0.00
98	Metals	Barium	FS	4	4	290	720	560	200
98	Metals	Barium	WB	3	3	320	830	560	250
98	Metals	Beryllium	FS	4	2	4.0	9.0	5.4	3.4
98	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
98	Metals	Cadmium	FS	4	1	4.0	5.0	2.8	1.5
98	Metals	Cadmium	WB	3	1	4.0	4.6	2.9	1.5
98	Metals	Chromium	FS	4	2	100	120	85	40
98	Metals	Chromium	WB	3	2	100	110	87	32
98	Metals	Cobalt	FS	4	4	30	37	34	3.1
98	Metals	Cobalt	WB	3	3	56	94	73	19
98	Metals	Copper	FS	4	4	450	610	520	65
98	Metals	Copper	WB	3	3	1,100	1,400	1,200	140
98	Metals	Lead	FS	4	0	10	10	5.0	0.00
98	Metals	Lead	WB	3	2	10	16	10	5.5
98	Metals	Manganese	FS	4	4	370	440	410	33
98	Metals	Manganese	WB	3	3	1,500	2,200	1,800	370
98	Metals	Mercury	FS	4	4	45	150	82	45
98	Metals	Mercury	WB	3	1	44	380	140	210
98	Metals	Nickel	FS	4	4	42	64	54	9.6
98	Metals	Nickel	WB	3	3	62	91	79	15
98	Metals	Selenium	FS	4	4	180	240	210	28
98	Metals	Selenium	WB	3	3	350	400	380	29
98	Metals	Silver	FS	4	0	100	200	88	25
98	Metals	Silver	WB	3	0	100	100	50	0.00
98	Metals	Thallium	FS	4	0	50	50	25	0.00
98	Metals	Thallium	WB	3	0	50	50	25	0.00
98	Metals	Vanadium	FS	4	3	20	26	21	7.5
98	Metals	Vanadium	WB	3	3	70	100	81	18
98	Metals	Zinc	FS	4	4	13,000	19,000	15,000	2,900
98	Metals	Zinc	WB	3	3	32,000	39,000	36,000	3,700
98	PCBs	Aroclor 1016	FS	4	0	18	19	9.3	0.29
98	PCBs	Aroclor 1016	WB	3	0	18	19	9.2	0.29
98	PCBs	Aroclor 1221	FS	4	0	18	19	9.3	0.29
98	PCBs	Aroclor 1221	WB	3	0	18	19	9.2	0.29
98	PCBs	Aroclor 1232	FS	4	0	18	19	9.3	0.29
98	PCBs	Aroclor 1232	WB	3	0	18	19	9.2	0.29
98	PCBs	Aroclor 1242	FS	4	0	18	19	9.3	0.29
98	PCBs	Aroclor 1242	WB	3	0	18	19	9.2	0.29
98	PCBs	Aroclor 1248	FS	4	0	18	19	9.3	0.29
98	PCBs	Aroclor 1248	WB	3	0	18	19	9.2	0.29
98	PCBs	Aroclor 1254	FS	4	4	9.9	20	15	4.2
98	PCBs	Aroclor 1254	WB	3	2	17	30	19	11
98	PCBs	Aroclor 1260	FS	4	0	18	19	9.3	0.29
98	PCBs	Aroclor 1260	WB	3	0	18	19	9.2	0.29
98	PCBs	PCB 77	FS	4	4	0.012	0.016	0.014	0.0017
98	PCBs	PCB 77	WB	3	3	0.016	0.020	0.019	0.0021
98	PCBs	PCB 105	FS	4	4	0.45	0.65	0.54	0.088
98	PCBs	PCB 105	WB	3	3	0.74	0.79	0.77	0.027
98	PCBs	PCB 114	FS	4	4	0.035	0.050	0.041	0.0066
98	PCBs	PCB 114	WB	3	3	0.055	0.061	0.058	0.0028
98	PCBs	PCB 118	FS	4	4	1.0	1.4	1.1	0.16
98	PCBs	PCB 118	WB	3	3	1.6	1.7	1.7	0.075
98	PCBs	PCB 123	FS	4	4	0.016	0.020	0.018	0.0016
98	PCBs	PCB 123	WB	3	3	0.015	0.029	0.023	0.0071
98	PCBs	PCB 126	FS	4	4	0.0032	0.0048	0.0042	0.00067
98	PCBs	PCB 126	WB	3	3	0.0052	0.0062	0.0058	0.00056
98	PCBs	PCB 156	FS	4	4	0.15	0.22	0.18	0.027
98	PCBs	PCB 156	WB	3	3	0.25	0.26	0.26	0.0033
98	PCBs	PCB 157	FS	4	4	0.027	0.039	0.032	0.0051
98	PCBs	PCB 157	WB	3	3	0.043	0.047	0.046	0.0021
98	PCBs	PCB 167	FS	4	4	0.062	0.089	0.074	0.011
98	PCBs	PCB 167	WB	3	3	0.10	0.10	0.10	0.0013

Appendix D-1: Site Summary Statistics
Rainbow Trout

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
98	PCBs	PCB 169	FS	4	0	0.00065	0.0011	0.00047	0.000099
98	PCBs	PCB 169	WB	3	0	0.00088	0.0010	0.00047	0.000038
98	PCBs	PCB 170	FS	4	4	0.16	0.21	0.17	0.023
98	PCBs	PCB 170	WB	3	3	0.24	0.25	0.24	0.0057
98	PCBs	PCB 180	FS	4	4	0.43	0.59	0.49	0.072
98	PCBs	PCB 180	WB	3	3	0.66	0.69	0.68	0.015
98	PCBs	PCB 189	FS	4	2	0.0070	0.0098	0.0058	0.0017
98	PCBs	PCB 189	WB	3	3	0.011	0.011	0.011	0.000092
98	Pesticides	Aldrin	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	Aldrin	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	Alpha-BHC	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	Alpha-BHC	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	Alpha-Chlordane	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	Alpha-Chlordane	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	Beta-BHC	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	Beta-BHC	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	cis-Nonachlor	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	cis-Nonachlor	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	DDD-o,p'	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	DDD-o,p'	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	DDE-o,p'	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	DDE-o,p'	WB	3	2	1.6	1.9	1.4	0.41
98	Pesticides	DDT-o,p'	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	DDT-o,p'	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	DDD-p,p'	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	DDD-p,p'	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	DDE-p,p'	FS	4	4	4.1	6.5	5.1	1.2
98	Pesticides	DDE-p,p'	WB	3	3	10	12	11	1.0
98	Pesticides	DDT-p,p'	FS	4	3	1.9	3.7	2.6	1.2
98	Pesticides	DDT-p,p'	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	DDMU	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	DDMU	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	Delta-BHC	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	Delta-BHC	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	Endosulfan Sulfate	FS	4	0	1.9	1.9	0.95	na
98	Pesticides	Endosulfan Sulfate	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	Gamma-Chlordane	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	Gamma-Chlordane	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	Gamma-Chlordane	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	Gamma-Chlordane	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	Heptachlor	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	Heptachlor	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	Heptachlor Epoxide	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	Heptachlor Epoxide	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	Hexachlorobenzene	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	Hexachlorobenzene	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	Lindane	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	Lindane	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	Mirex	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	Mirex	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	Oxychlordane	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	Oxychlordane	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	Pentachloroanisol	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	Pentachloroanisol	WB	3	0	1.8	1.9	0.92	0.029
98	Pesticides	Toxaphene	FS	4	0	55	57	28	0.48
98	Pesticides	Toxaphene	WB	3	0	53	58	28	1.3
98	Pesticides	trans-Nonachlor	FS	4	0	1.8	1.9	0.93	0.029
98	Pesticides	trans-Nonachlor	WB	3	0	1.8	1.9	0.92	0.029
98	Semivolatiles	1,2,4-Trichlorobenzene	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	4.9	5.0	2.5	0.029
98	Semivolatiles	1,2-Diphenylhydrazine	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	4.9	5.0	2.5	0.029
98	Semivolatiles	2,4-Dinitrotoluene	FS	4	0	9.6	10	4.9	0.13
98	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	9.8	10	5.0	0.058
98	Semivolatiles	2,6-Dinitrotoluene	FS	4	0	19	20	9.7	0.25
98	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	20	20	9.9	0.12
98	Semivolatiles	2-Chloronaphthalene	FS	4	0	9.6	10	4.9	0.13
98	Semivolatiles	2-Chloronaphthalene	WB	3	0	4.9	10	4.2	1.5
98	Semivolatiles	4-Bromophenyl-Phenylether	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	4.9	5.0	2.5	0.029
98	Semivolatiles	4-Chlorophenyl-Phenylether	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	4.9	5.0	2.5	0.029
98	Semivolatiles	Acenaphthene	FS	4	0	9.6	10	4.9	0.13
98	Semivolatiles	Acenaphthene	WB	3	0	9.8	10	5.0	0.058

Appendix D-1: Site Summary Statistics
Rainbow Trout

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
98	Semivolatiles	Acenaphthylene	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	Acenaphthylene	WB	3	0	4.9	5.0	2.5	0.029
98	Semivolatiles	Anthracene	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	Anthracene	WB	3	0	4.9	5.0	2.5	0.029
98	Semivolatiles	Benzene, 1,2-dichloro-	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	4.9	5.0	2.5	0.029
98	Semivolatiles	Benzene, 1,3-dichloro-	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	4.9	5.0	2.5	0.029
98	Semivolatiles	Benzene, 1,4-dichloro-	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	4.9	5.0	2.5	0.029
98	Semivolatiles	Benzo(a)anthracene	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	Benzo(a)anthracene	WB	3	0	4.9	5.0	2.5	0.029
98	Semivolatiles	Benzo(a)pyrene	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	Benzo(a)pyrene	WB	3	0	25	98	25	21
98	Semivolatiles	Benzo(g,h,i)perylene	FS	4	0	9.6	10	4.9	0.13
98	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	50	200	49	42
98	Semivolatiles	Benzo[b]Fluoranthene	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	25	200	41	49
98	Semivolatiles	Benzo[k]fluoranthene	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	25	200	41	49
98	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	4	0	9.6	10	4.9	0.13
98	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	9.8	10	5.0	0.058
98	Semivolatiles	Chrysene	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	Chrysene	WB	3	0	4.9	5.0	2.5	0.029
98	Semivolatiles	Dibenz[a,h]anthracene	FS	4	0	9.6	10	4.9	0.13
98	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	50	200	49	42
98	Semivolatiles	Dibenzofuran	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	Dibenzofuran	WB	3	0	4.9	5.0	2.5	0.029
98	Semivolatiles	Fluoranthene	FS	4	0	9.6	10	4.9	0.13
98	Semivolatiles	Fluoranthene	WB	3	0	9.8	10	5.0	0.058
98	Semivolatiles	9H-Fluorene	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	9H-Fluorene	WB	3	0	4.9	5.0	2.5	0.029
98	Semivolatiles	Hexachlorobutadiene	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	Hexachlorobutadiene	WB	3	0	4.9	5.0	2.5	0.029
98	Semivolatiles	Hexachloroethane	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	Hexachloroethane	WB	3	0	4.9	5.0	2.5	0.029
98	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	4	0	9.6	10	4.9	0.13
98	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	50	200	49	42
98	Semivolatiles	Naphthalene	FS	4	0	17	24	10	1.5
98	Semivolatiles	Naphthalene	WB	3	0	23	33	13	2.7
98	Semivolatiles	Naphthalene, 1-methyl-	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	4.9	5.0	2.5	0.029
98	Semivolatiles	Naphthalene, 2-methyl-	FS	4	0	4.8	10	3.1	1.4
98	Semivolatiles	Naphthalene, 2-methyl-	WB	3	1	5.9	8.4	4.6	1.2
98	Semivolatiles	Nitrobenzene	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	Nitrobenzene	WB	3	0	4.9	5.0	2.5	0.029
98	Semivolatiles	Phenanthrene	FS	4	0	4.8	5.1	2.4	0.075
98	Semivolatiles	Phenanthrene	WB	3	0	5.0	5.9	2.7	0.26
98	Semivolatiles	Pyrene	FS	4	0	9.6	10	4.9	0.13
98	Semivolatiles	Pyrene	WB	3	0	9.8	10	5.0	0.058
98	Semivolatiles	Retene	FS	4	0	9.6	10	4.9	0.13
98	Semivolatiles	Retene	WB	3	1	10	13	7.8	4.8
101	Dioxin/furans	2,3,7,8-TCDD	WB	4	2	0.000010	0.000070	0.000035	0.000035
101	Dioxin/furans	1,2,3,7,8-PeCDD	WB	4	4	0.00014	0.00017	0.00015	0.000015
101	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	4	4	0.00010	0.00013	0.00011	0.000014
101	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	4	4	0.000070	0.00013	0.00010	0.000029
101	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	4	4	0.000040	0.000060	0.000048	0.0000096
101	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	4	4	0.00015	0.00027	0.00020	0.000053
101	Dioxin/furans	OCDD	WB	4	4	0.00018	0.00043	0.00029	0.00012
101	Dioxin/furans	2,3,7,8-TCDF	WB	4	4	0.000060	0.00014	0.000095	0.000041
101	Dioxin/furans	1,2,3,7,8-PeCDF	WB	4	4	0.000040	0.000050	0.000045	0.0000058
101	Dioxin/furans	2,3,4,7,8-PeCDF	WB	4	4	0.000040	0.000050	0.000045	0.0000058
101	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	4	2	0.000010	0.000030	0.000015	0.000012
101	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	4	4	0.000030	0.000040	0.000035	0.0000058
101	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	4	3	0.000010	0.000070	0.000049	0.000030
101	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	4	4	0.00013	0.00016	0.00014	0.000014
101	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	4	3	0.000010	0.000080	0.000056	0.000034
101	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	4	3	0.000010	0.000040	0.000021	0.000014
101	Dioxin/furans	OCDF	WB	4	3	0.000010	0.000060	0.000029	0.000023
101	Guaiacols/Phenols	4-Chloroguaiacol	WB	4	0	500	1,200	330	160
101	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	4	0	500	1,200	330	160
101	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	4	0	500	1,200	330	160
101	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	4	0	500	1,200	330	160
101	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	4	0	500	1,200	330	160
101	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	4	0	200	460	130	66
101	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	4	0	500	1,200	330	160

Appendix D-1: Site Summary Statistics
Rainbow Trout

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
101	Guaiacols/Phenols	Tetrachloroguaiacol	WB	4	0	200	460	130	66
101	Guaiacols/Phenols	2-Chlorophenol	WB	4	0	200	460	130	66
101	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	4	0	200	460	130	66
101	Guaiacols/Phenols	2,4-Dichlorophenol	WB	4	0	200	460	130	66
101	Guaiacols/Phenols	2,4-Dimethylphenol	WB	4	0	500	1,200	330	160
101	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	4	0	200	460	130	66
101	Guaiacols/Phenols	Pentachlorophenol	WB	4	0	200	460	130	66
101	Guaiacols/Phenols	Phenol	WB	4	0	200	460	130	66
101	Metals	Aluminum	WB	4	4	2,300	150,000	64,000	69,000
101	Metals	Antimony	WB	4	0	50	50	25	0.00
101	Metals	Arsenic	WB	4	3	50	130	79	49
101	Metals	Barium	WB	4	4	950	4,000	2,300	1,400
101	Metals	Beryllium	WB	4	1	4.0	11	5.8	3.8
101	Metals	Cadmium	WB	4	3	4.0	58	25	26
101	Metals	Chromium	WB	4	4	100	160	120	28
101	Metals	Cobalt	WB	4	4	53	210	130	79
101	Metals	Copper	WB	4	4	900	5,000	2,900	1,700
101	Metals	Lead	WB	4	4	11	88	42	35
101	Metals	Manganese	WB	4	4	1,100	9,700	4,500	4,100
101	Metals	Mercury	WB	4	4	33	42	37	3.8
101	Metals	Nickel	WB	4	4	130	1,100	660	400
101	Metals	Selenium	WB	4	4	230	310	260	37
101	Metals	Silver	WB	4	0	100	100	50	0.00
101	Metals	Thallium	WB	4	0	50	50	25	0.00
101	Metals	Vanadium	WB	4	4	73	770	400	360
101	Metals	Zinc	WB	4	4	24,000	29,000	27,000	2,600
101	PCBs	Aroclor 1016	WB	4	0	18	20	9.6	0.48
101	PCBs	Aroclor 1221	WB	4	0	18	20	9.6	0.48
101	PCBs	Aroclor 1232	WB	4	0	18	20	9.6	0.48
101	PCBs	Aroclor 1242	WB	4	0	18	20	9.6	0.48
101	PCBs	Aroclor 1248	WB	4	0	18	20	9.6	0.48
101	PCBs	Aroclor 1254	WB	4	0	18	20	9.6	0.48
101	PCBs	Aroclor 1260	WB	4	1	6.0	20	8.9	1.9
101	PCBs	PCB 77	WB	4	4	0.0022	0.0075	0.0048	0.0030
101	PCBs	PCB 105	WB	4	4	0.034	0.21	0.12	0.098
101	PCBs	PCB 114	WB	4	3	0.00028	0.021	0.011	0.010
101	PCBs	PCB 118	WB	4	4	0.063	0.48	0.27	0.24
101	PCBs	PCB 123	WB	4	4	0.0018	0.011	0.0055	0.0044
101	PCBs	PCB 126	WB	4	3	0.00048	0.0062	0.0023	0.0027
101	PCBs	PCB 156	WB	4	4	0.012	0.080	0.045	0.038
101	PCBs	PCB 157	WB	4	0	0.00050	0.0010	0.00034	0.00012
101	PCBs	PCB 167	WB	4	4	0.0066	0.040	0.024	0.019
101	PCBs	PCB 169	WB	4	0	0.00050	0.0012	0.00033	0.00017
101	PCBs	PCB 170	WB	4	4	0.027	0.22	0.12	0.10
101	PCBs	PCB 180	WB	4	4	0.11	0.75	0.40	0.33
101	PCBs	PCB 189	WB	4	2	0.00050	0.0069	0.0022	0.0032
101	Pesticides	Aldrin	WB	4	0	1.8	2.5	1.0	0.16
101	Pesticides	Alpha-BHC	WB	4	0	1.8	2.5	1.1	0.16
101	Pesticides	Alpha-Chlordane	WB	4	0	1.8	2.5	1.1	0.16
101	Pesticides	Beta-BHC	WB	4	0	1.8	2.5	1.1	0.16
101	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	4	0	1.8	2.5	1.1	0.16
101	Pesticides	cis-Nonachlor	WB	4	0	1.8	2.5	1.1	0.16
101	Pesticides	DDD-o,p'	WB	4	0	1.8	2.5	1.1	0.16
101	Pesticides	DDE-o,p'	WB	4	1	1.8	4.3	1.9	1.6
101	Pesticides	DDT-o,p'	WB	4	0	1.8	2.5	1.1	0.16
101	Pesticides	DDD-p,p'	WB	4	1	1.2	2.5	1.2	0.025
101	Pesticides	DDE-p,p'	WB	4	4	15	18	17	1.3
101	Pesticides	DDT-p,p'	WB	4	1	1.8	2.5	1.4	0.56
101	Pesticides	DDMU	WB	2	0	1.8	2.5	1.1	0.25
101	Pesticides	Delta-BHC	WB	4	0	1.8	2.5	1.1	0.16
101	Pesticides	Endosulfan Sulfate	WB	4	0	1.8	2.5	1.1	0.16
101	Pesticides	Gamma-Chlordane	WB	4	0	1.8	2.5	1.1	0.16
101	Pesticides	Gamma-Chlordene	WB	4	0	1.8	2.5	1.1	0.16
101	Pesticides	Heptachlor	WB	4	0	1.8	2.5	1.0	0.16
101	Pesticides	Heptachlor Epoxide	WB	4	0	1.8	2.5	1.1	0.16
101	Pesticides	Hexachlorobenzene	WB	4	0	1.8	2.5	1.1	0.16
101	Pesticides	Lindane	WB	4	0	1.8	2.5	1.1	0.16
101	Pesticides	Mirex	WB	4	0	1.8	2.5	1.1	0.16
101	Pesticides	Oxychlordane	WB	4	0	2.4	18	3.2	3.9
101	Pesticides	Pentachloroanisol	WB	4	0	1.8	2.5	1.1	0.16
101	Pesticides	Toxaphene	WB	3	0	54	73	33	5.2
101	Pesticides	trans-Nonachlor	WB	4	0	1.8	2.5	1.1	0.16
101	Semivolatiles	1,2,4-Trichlorobenzene	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	1,2-Diphenylhydrazine	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	2,4-Dinitrotoluene	WB	4	0	9.9	23	6.6	3.3
101	Semivolatiles	2,6-Dinitrotoluene	WB	4	0	20	46	13	6.6

Appendix D-1: Site Summary Statistics
Rainbow Trout

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
101	Semivolatiles	2-Chloronaphthalene	WB	4	0	9.9	23	6.6	3.3
101	Semivolatiles	4-Bromophenyl-Phenylether	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	4-Chlorophenyl-Phenylether	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	Acenaphthene	WB	4	0	9.9	23	6.6	3.3
101	Semivolatiles	Acenaphthylene	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	Anthracene	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	Benzene, 1,2-dichloro-	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	Benzene, 1,3-dichloro-	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	Benzene, 1,4-dichloro-	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	Benzo(a)anthracene	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	Benzo(a)pyrene	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	Benzo(g,h,i)perylene	WB	4	0	9.9	23	6.6	3.3
101	Semivolatiles	Benzo[b]fluoranthene	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	Benzo[k]fluoranthene	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	4	0	9.9	23	6.6	3.3
101	Semivolatiles	Chrysene	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	Dibenz[a,h]anthracene	WB	4	0	9.9	23	6.6	3.3
101	Semivolatiles	Dibenzofuran	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	Fluoranthene	WB	4	0	9.9	23	6.6	3.3
101	Semivolatiles	9H-Fluorene	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	Hexachlorobutadiene	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	Hexachloroethane	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	4	0	9.9	23	6.6	3.3
101	Semivolatiles	Naphthalene	WB	4	0	5.1	12	4.9	1.6
101	Semivolatiles	Naphthalene, 1-methyl-	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	Naphthalene, 2-methyl-	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	Nitrobenzene	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	Phenanthrene	WB	4	0	5.0	12	3.3	1.6
101	Semivolatiles	Pyrene	WB	4	0	9.9	23	6.6	3.3
101	Semivolatiles	Retene	WB	4	0	9.9	23	6.6	3.3

Appendix D-1: Site Summary Statistics
Channel Catfish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Dioxin/furans	2,3,7,8-TCDD	FS	2	2	0.0010	0.0014	0.0012	0.00029
8	Dioxin/furans	2,3,7,8-TCDD	WB	3	3	0.00066	0.0011	0.00087	0.00022
8	Dioxin/furans	1,2,3,7,8-PeCDD	FS	2	2	0.00049	0.00057	0.00053	0.000057
8	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.00037	0.00055	0.00047	0.000092
8	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	2	2	0.00014	0.00030	0.00022	0.00011
8	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	3	0.00020	0.00022	0.00021	0.000012
8	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	2	2	0.00059	0.0011	0.00082	0.00033
8	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	3	0.00070	0.00085	0.00077	0.000076
8	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	2	2	0.00014	0.00017	0.00016	0.000021
8	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	3	0.00012	0.00014	0.00013	0.000010
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	2	2	0.00047	0.0012	0.00086	0.00054
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00059	0.00073	0.00065	0.000074
8	Dioxin/furans	OCDD	FS	2	2	0.00037	0.0013	0.00081	0.00062
8	Dioxin/furans	OCDD	WB	3	3	0.00057	0.00086	0.00074	0.00015
8	Dioxin/furans	2,3,7,8-TCDF	FS	2	2	0.0022	0.0034	0.0028	0.00085
8	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.0018	0.0031	0.0025	0.00064
8	Dioxin/furans	1,2,3,7,8-PeCDF	FS	2	2	0.00021	0.00031	0.00026	0.000071
8	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.00014	0.00029	0.00020	0.000078
8	Dioxin/furans	2,3,4,7,8-PeCDF	FS	2	2	0.00052	0.00066	0.00059	0.000099
8	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00033	0.00055	0.00045	0.00011
8	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	2	1	0.000020	0.000090	0.000050	0.000057
8	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	3	0.000030	0.000080	0.000050	0.000026
8	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	2	2	0.000030	0.000050	0.000040	0.000014
8	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	1	0.000010	0.000060	0.000025	0.000030
8	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	2	0	0.000020	0.000020	0.000010	0.00
8	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
8	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	2	2	0.000050	0.000050	0.000050	0.00
8	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	2	0.000010	0.000060	0.000042	0.000032
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	2	0	0.000020	0.000050	0.000018	0.000011
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
8	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	2	0	0.000020	0.000050	0.000018	0.000011
8	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
8	Dioxin/furans	OCDF	FS	2	2	0.000030	0.000090	0.000060	0.000042
8	Dioxin/furans	OCDF	WB	3	2	0.000010	0.000040	0.000020	0.000017
8	Guaiacols/Phenols	4-Chloroguaiacol	FS	2	0	910	930	460	7.4
8	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	950	980	480	9.5
8	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	2	0	910	930	460	7.4
8	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	950	980	480	9.5
8	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	2	0	910	930	460	7.4
8	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	950	980	480	9.5
8	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	2	0	910	930	460	7.4
8	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	950	980	480	9.5
8	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	2	0	910	930	460	7.4
8	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	950	980	480	9.5
8	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	2	0	370	370	180	2.8
8	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	380	390	190	3.8
8	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	2	0	910	930	460	7.4
8	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	950	980	480	9.5
8	Guaiacols/Phenols	Tetrachloroguaiacol	FS	2	0	370	370	180	2.8
8	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	380	390	190	3.8
8	Guaiacols/Phenols	2-Chlorophenol	FS	2	0	370	370	180	2.8
8	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	380	390	190	3.8
8	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	2	0	370	370	180	2.8
8	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	380	390	190	3.8
8	Guaiacols/Phenols	2,4-Dichlorophenol	FS	2	0	370	370	180	2.8
8	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	380	390	190	3.8
8	Guaiacols/Phenols	2,4-Dimethylphenol	FS	2	0	910	930	460	7.4
8	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	950	980	480	9.5
8	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	2	0	370	370	180	2.8
8	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	380	390	190	3.8
8	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	2	0	370	370	180	2.8
8	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	380	390	190	3.8
8	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	2	0	370	370	180	2.8
8	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	380	390	190	3.8
8	Guaiacols/Phenols	Pentachlorophenol	FS	2	0	370	370	180	2.8
8	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	380	390	190	3.8
8	Guaiacols/Phenols	Phenol	FS	2	0	370	370	180	2.8
8	Guaiacols/Phenols	Phenol	WB	3	0	380	390	190	3.8
8	Metals	Aluminum	FS	2	1	1,000	42,000	21,000	29,000
8	Metals	Aluminum	WB	3	3	1,700	9,000	4,300	4,100
8	Metals	Antimony	FS	2	0	50	50	25	0.00
8	Metals	Antimony	WB	3	0	50	50	25	0.00
8	Metals	Arsenic	FS	2	1	50	330	180	220
8	Metals	Arsenic	WB	3	3	270	430	330	90
8	Metals	Barium	FS	2	1	200	280	190	130
8	Metals	Barium	WB	3	3	490	590	550	52

Appendix D-1: Site Summary Statistics
Channel Catfish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Metals	Beryllium	FS	2	0	4.0	4.0	2.0	0.00
8	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
8	Metals	Cadmium	FS	2	0	4.0	4.0	2.0	0.00
8	Metals	Cadmium	WB	3	3	13	14	14	0.58
8	Metals	Chromium	FS	2	2	110	130	120	14
8	Metals	Chromium	WB	3	3	210	250	230	20
8	Metals	Cobalt	FS	2	2	78	99	89	15
8	Metals	Cobalt	WB	3	3	120	190	160	39
8	Metals	Copper	FS	2	2	350	360	360	7.1
8	Metals	Copper	WB	3	3	410	590	510	91
8	Metals	Lead	FS	2	1	10	11	8.0	4.2
8	Metals	Lead	WB	3	3	12	20	16	4.0
8	Metals	Manganese	FS	2	2	130	140	140	4.2
8	Metals	Manganese	WB	3	3	1,200	1,800	1,600	310
8	Metals	Mercury	FS	2	2	240	240	240	4.2
8	Metals	Mercury	WB	3	3	180	320	230	74
8	Metals	Nickel	FS	2	0	30	30	15	0.00
8	Metals	Nickel	WB	3	3	90	95	92	2.5
8	Metals	Selenium	FS	2	0	500	500	250	0.00
8	Metals	Selenium	WB	3	3	510	630	580	58
8	Metals	Silver	FS	2	0	100	100	50	0.00
8	Metals	Silver	WB	3	0	100	100	50	0.00
8	Metals	Thallium	FS	2	0	50	50	25	0.00
8	Metals	Thallium	WB	3	0	50	50	25	0.00
8	Metals	Vanadium	FS	2	0	10	10	5.0	0.00
8	Metals	Vanadium	WB	3	3	48	92	72	22
8	Metals	Zinc	FS	2	2	7,800	9,900	8,800	1,500
8	Metals	Zinc	WB	3	3	17,000	19,000	18,000	1,100
8	PCBs	Aroclor 1016	FS	2	0	19	20	9.8	0.35
8	PCBs	Aroclor 1016	WB	3	0	16	20	8.8	1.0
8	PCBs	Aroclor 1221	FS	2	0	19	20	9.8	0.35
8	PCBs	Aroclor 1221	WB	3	0	16	20	8.8	1.0
8	PCBs	Aroclor 1232	FS	2	0	19	20	9.8	0.35
8	PCBs	Aroclor 1232	WB	3	0	16	20	8.8	1.0
8	PCBs	Aroclor 1242	FS	2	0	19	20	9.8	0.35
8	PCBs	Aroclor 1242	WB	3	0	16	20	8.8	1.0
8	PCBs	Aroclor 1248	FS	2	0	19	20	9.8	0.35
8	PCBs	Aroclor 1248	WB	3	0	16	20	8.8	1.0
8	PCBs	Aroclor 1254	FS	2	2	36	63	50	19
8	PCBs	Aroclor 1254	WB	3	3	25	41	33	8.0
8	PCBs	Aroclor 1260	FS	2	2	37	88	63	36
8	PCBs	Aroclor 1260	WB	3	3	32	77	52	23
8	PCBs	PCB 77	FS	2	2	0.036	0.037	0.036	0.00064
8	PCBs	PCB 77	WB	3	3	0.022	0.037	0.029	0.0075
8	PCBs	PCB 105	FS	2	2	2.0	3.9	3.0	1.3
8	PCBs	PCB 105	WB	3	3	1.3	3.3	2.3	0.97
8	PCBs	PCB 114	FS	2	2	0.19	0.42	0.31	0.16
8	PCBs	PCB 114	WB	3	3	0.12	0.33	0.23	0.10
8	PCBs	PCB 118	FS	2	2	4.6	9.1	6.8	3.2
8	PCBs	PCB 118	WB	3	3	2.9	7.1	4.9	2.1
8	PCBs	PCB 123	FS	2	2	0.092	0.18	0.14	0.064
8	PCBs	PCB 123	WB	3	3	0.059	0.15	0.11	0.046
8	PCBs	PCB 126	FS	2	1	0.0017	0.014	0.0073	0.0091
8	PCBs	PCB 126	WB	3	2	0.0017	0.030	0.013	0.015
8	PCBs	PCB 156	FS	2	2	0.91	1.9	1.4	0.70
8	PCBs	PCB 156	WB	3	3	0.52	1.5	1.0	0.50
8	PCBs	PCB 157	FS	2	2	0.17	0.36	0.26	0.14
8	PCBs	PCB 157	WB	3	3	0.099	0.28	0.19	0.091
8	PCBs	PCB 167	FS	2	2	0.35	0.75	0.55	0.29
8	PCBs	PCB 167	WB	3	3	0.22	0.56	0.40	0.17
8	PCBs	PCB 169	FS	2	0	0.0018	0.0026	0.0011	0.00028
8	PCBs	PCB 169	WB	3	0	0.0018	0.0027	0.0011	0.00022
8	PCBs	PCB 170	FS	2	2	1.7	3.9	2.8	1.6
8	PCBs	PCB 170	WB	3	3	1.00	3.0	2.0	0.98
8	PCBs	PCB 180	FS	2	2	4.3	10	7.3	4.3
8	PCBs	PCB 180	WB	3	3	3.2	9.2	6.2	3.0
8	PCBs	PCB 189	FS	2	2	0.058	0.13	0.096	0.054
8	PCBs	PCB 189	WB	3	3	0.033	0.10	0.067	0.034
8	Pesticides	Aldrin	FS	2	0	1.9	2.0	0.98	0.035
8	Pesticides	Aldrin	WB	3	0	1.6	2.0	0.88	0.10
8	Pesticides	Alpha-BHC	FS	2	0	1.9	2.0	0.98	0.035
8	Pesticides	Alpha-BHC	WB	3	0	1.6	2.0	0.88	0.10
8	Pesticides	Alpha-Chlordene	FS	2	0	1.9	2.0	0.98	0.035
8	Pesticides	Alpha-Chlordene	WB	3	0	1.6	2.0	0.88	0.10
8	Pesticides	Beta-BHC	FS	2	0	1.9	2.0	0.98	0.035
8	Pesticides	Beta-BHC	WB	3	0	1.6	2.0	0.88	0.10

Appendix D-1: Site Summary Statistics
Channel Catfish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	2	1	2.0	3.2	2.1	1.6
8	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	1	0.94	2.0	0.91	0.10
8	Pesticides	cis-Nonachlor	FS	2	2	2.0	5.2	3.6	2.3
8	Pesticides	cis-Nonachlor	WB	3	3	1.3	3.2	2.5	1.0
8	Pesticides	DDD-o,p'	FS	2	2	6.4	9.4	7.9	2.1
8	Pesticides	DDD-o,p'	WB	3	3	5.2	7.6	6.4	1.2
8	Pesticides	DDE-o,p'	FS	2	1	2.0	9.6	5.3	6.1
8	Pesticides	DDE-o,p'	WB	3	3	3.8	8.1	6.1	2.2
8	Pesticides	DDT-o,p'	FS	2	0	1.9	2.0	0.98	0.035
8	Pesticides	DDT-o,p'	WB	3	0	1.6	2.0	0.88	0.10
8	Pesticides	DDD-p,p'	FS	2	2	42	68	55	18
8	Pesticides	DDD-p,p'	WB	3	3	37	66	51	15
8	Pesticides	DDE-p,p'	FS	2	2	330	520	430	130
8	Pesticides	DDE-p,p'	WB	3	3	280	530	410	130
8	Pesticides	DDT-p,p'	FS	2	2	1.9	7.4	4.7	3.9
8	Pesticides	DDT-p,p'	WB	3	3	0.82	3.2	1.9	1.2
8	Pesticides	DDMU	FS	2	2	6.5	11	8.8	3.2
8	Pesticides	DDMU	WB	3	3	5.3	10	7.7	2.4
8	Pesticides	Delta-BHC	FS	2	0	1.9	2.0	0.98	0.035
8	Pesticides	Delta-BHC	WB	3	0	1.6	2.0	0.88	0.10
8	Pesticides	Endosulfan Sulfate	FS	2	0	1.9	2.0	0.98	0.035
8	Pesticides	Endosulfan Sulfate	WB	3	0	1.6	2.0	0.88	0.10
8	Pesticides	Gamma-Chlordane	FS	2	2	2.1	3.6	2.9	1.1
8	Pesticides	Gamma-Chlordane	WB	3	3	1.5	2.9	2.2	0.70
8	Pesticides	gamma-Chlordene	FS	2	0	1.9	2.0	0.98	0.035
8	Pesticides	gamma-Chlordene	WB	3	0	1.6	2.0	0.88	0.10
8	Pesticides	Heptachlor	FS	2	0	1.9	2.0	0.98	0.035
8	Pesticides	Heptachlor	WB	3	0	1.6	2.0	0.88	0.10
8	Pesticides	Heptachlor Epoxide	FS	2	0	1.9	2.0	0.98	0.035
8	Pesticides	Heptachlor Epoxide	WB	3	0	1.6	2.0	0.88	0.10
8	Pesticides	Hexachlorobenzene	FS	2	2	4.5	5.9	5.2	0.99
8	Pesticides	Hexachlorobenzene	WB	3	3	4.1	5.9	5.1	0.92
8	Pesticides	Lindane	FS	2	0	1.9	2.0	0.98	0.035
8	Pesticides	Lindane	WB	3	0	1.6	2.0	0.88	0.10
8	Pesticides	Mirex	FS	2	2	2.8	5.9	4.4	2.2
8	Pesticides	Mirex	WB	3	3	2.8	7.6	5.6	2.5
8	Pesticides	Oxychlordane	FS	2	2	1.5	2.6	2.1	0.78
8	Pesticides	Oxychlordane	WB	3	2	1.6	2.7	1.9	0.97
8	Pesticides	Pentachloroanisol	FS	2	0	1.9	2.0	0.98	0.035
8	Pesticides	Pentachloroanisol	WB	3	0	1.6	2.0	0.88	0.10
8	Pesticides	Toxaphene	FS	2	0	58	59	29	0.35
8	Pesticides	Toxaphene	WB	3	0	49	60	27	2.9
8	Pesticides	trans-Nonachlor	FS	2	2	5.3	11	8.2	4.0
8	Pesticides	trans-Nonachlor	WB	3	3	4.3	8.7	6.5	2.2
8	Semivolatiles	1,2,4-Trichlorobenzene	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	1,2-Diphenylhydrazine	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	2,4-Dinitrotoluene	FS	2	0	18	19	9.2	0.14
8	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	19	20	9.6	0.21
8	Semivolatiles	2,6-Dinitrotoluene	FS	2	0	36	37	18	0.28
8	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	38	39	19	0.42
8	Semivolatiles	2-Chloronaphthalene	FS	2	0	18	19	9.2	0.14
8	Semivolatiles	2-Chloronaphthalene	WB	3	0	19	20	9.6	0.21
8	Semivolatiles	4-Bromophenyl-Phenylether	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	4-Chlorophenyl-Phenylether	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Acenaphthene	FS	2	0	18	19	9.2	0.14
8	Semivolatiles	Acenaphthene	WB	3	0	19	20	9.6	0.21
8	Semivolatiles	Acenaphthylene	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	Acenaphthylene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Anthracene	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	Anthracene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Benzene, 1,2-dichloro-	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Benzene, 1,3-dichloro-	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Benzene, 1,4-dichloro-	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Benzo(a)anthracene	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	Benzo(a)anthracene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Benzo(a)pyrene	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	Benzo(a)pyrene	WB	3	0	9.4	49	11	11
8	Semivolatiles	Benzo(g,h,i)perylene	FS	2	0	18	19	9.2	0.14
8	Semivolatiles	Benzo(g,h,i)perylene	WB	3	1	15	98	25	21

Appendix D-1: Site Summary Statistics
Channel Catfish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Semivolatiles	Benzo[b]Fluoranthene	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	9.4	49	11	11
8	Semivolatiles	Benzo[k]fluoranthene	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	9.4	49	11	11
8	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	2	0	18	19	9.2	0.14
8	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	19	20	9.6	0.21
8	Semivolatiles	Chrysene	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	Chrysene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Dibenz[a,h]anthracene	FS	2	0	18	19	9.2	0.14
8	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	19	98	23	23
8	Semivolatiles	Dibenzofuran	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	Dibenzofuran	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Fluoranthene	FS	2	0	18	19	9.2	0.14
8	Semivolatiles	Fluoranthene	WB	3	0	19	20	9.6	0.21
8	Semivolatiles	9H-Fluorene	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	9H-Fluorene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Hexachlorobutadiene	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	Hexachlorobutadiene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Hexachloroethane	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	Hexachloroethane	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	2	0	18	19	9.2	0.14
8	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	19	98	23	23
8	Semivolatiles	Naphthalene	FS	2	0	24	27	13	1.2
8	Semivolatiles	Naphthalene	WB	3	0	20	24	11	1.3
8	Semivolatiles	Naphthalene, 1-methyl-	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Naphthalene, 2-methyl-	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Nitrobenzene	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	Nitrobenzene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Phenanthrene	FS	2	0	9.1	9.3	4.6	0.071
8	Semivolatiles	Phenanthrene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Pyrene	FS	2	0	18	19	9.2	0.14
8	Semivolatiles	Pyrene	WB	3	0	19	20	9.6	0.21
8	Semivolatiles	Retene	FS	2	0	18	19	9.2	0.14
8	Semivolatiles	Retene	WB	3	0	19	20	9.6	0.21
48	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	920	940	460	5.8
48	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	890	950	460	16
48	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	920	940	460	5.8
48	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	890	950	460	16
48	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	920	940	460	5.8
48	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	890	950	460	16
48	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	920	940	460	5.8
48	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	890	950	460	16
48	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	920	940	460	5.8
48	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	890	950	460	16
48	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	370	380	190	2.3
48	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	360	380	190	6.6
48	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	920	940	460	5.8
48	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	890	950	460	16
48	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	370	380	190	2.3
48	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	360	380	190	6.6
48	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	370	380	190	2.3
48	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	360	380	190	6.6
48	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	370	380	190	2.3
48	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	360	380	190	6.6
48	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	370	380	190	2.3
48	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	360	380	190	6.6
48	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	920	940	460	5.8
48	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	890	950	460	16
48	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	370	380	190	2.3
48	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	360	380	190	6.6
48	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	370	380	190	2.3
48	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	360	380	190	6.6
48	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	370	380	190	2.3
48	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	360	380	190	6.6
48	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	370	380	190	2.3
48	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	360	380	190	6.6
48	Guaiacols/Phenols	Phenol	FS	3	0	370	380	190	2.3
48	Guaiacols/Phenols	Phenol	WB	3	0	360	380	190	6.6
48	Metals	Aluminum	FS	3	2	540	1,000	640	220
48	Metals	Aluminum	WB	3	3	5,600	7,800	7,000	1,300
48	Metals	Antimony	FS	3	0	50	50	25	0.00
48	Metals	Antimony	WB	3	0	50	50	25	0.00
48	Metals	Arsenic	FS	3	2	50	69	53	25
48	Metals	Arsenic	WB	3	3	110	150	120	23

Appendix D-1: Site Summary Statistics
Channel Catfish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Metals	Barium	FS	3	3	740	950	830	110
48	Metals	Barium	WB	3	3	1,300	1,900	1,500	320
48	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
48	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
48	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
48	Metals	Cadmium	WB	3	3	18	26	21	4.6
48	Metals	Chromium	FS	3	3	180	350	270	86
48	Metals	Chromium	WB	3	3	270	280	270	5.8
48	Metals	Cobalt	FS	3	3	110	280	170	92
48	Metals	Cobalt	WB	3	3	160	210	180	24
48	Metals	Copper	FS	3	3	310	340	330	15
48	Metals	Copper	WB	3	3	480	550	510	33
48	Metals	Lead	FS	3	0	10	10	5.0	0.00
48	Metals	Lead	WB	3	3	20	33	25	6.8
48	Metals	Manganese	FS	3	3	210	360	270	81
48	Metals	Manganese	WB	3	3	2,400	2,800	2,500	230
48	Metals	Mercury	FS	3	3	260	280	270	7.1
48	Metals	Mercury	WB	3	3	140	230	200	50
48	Metals	Nickel	FS	3	2	30	77	49	31
48	Metals	Nickel	WB	3	3	100	130	120	11
48	Metals	Selenium	FS	3	3	240	270	250	15
48	Metals	Selenium	WB	3	3	410	450	430	21
48	Metals	Silver	FS	3	0	100	100	50	0.00
48	Metals	Silver	WB	3	0	100	100	50	0.00
48	Metals	Thallium	FS	3	0	50	50	25	0.00
48	Metals	Thallium	WB	3	0	50	50	25	0.00
48	Metals	Vanadium	FS	3	1	10	23	11	10
48	Metals	Vanadium	WB	3	3	130	190	150	32
48	Metals	Zinc	FS	3	3	8,200	10,000	9,200	900
48	Metals	Zinc	WB	3	3	17,000	18,000	18,000	550
48	PCBs	Aroclor 1016	FS	3	0	19	20	9.7	0.29
48	PCBs	Aroclor 1016	WB	3	0	19	19	9.5	0.00
48	PCBs	Aroclor 1221	FS	3	0	19	20	9.7	0.29
48	PCBs	Aroclor 1221	WB	3	0	19	19	9.5	0.00
48	PCBs	Aroclor 1232	FS	3	0	19	20	9.7	0.29
48	PCBs	Aroclor 1232	WB	3	0	19	19	9.5	0.00
48	PCBs	Aroclor 1242	FS	3	0	19	20	9.7	0.29
48	PCBs	Aroclor 1242	WB	3	0	19	19	9.5	0.00
48	PCBs	Aroclor 1248	FS	3	0	19	20	9.7	0.29
48	PCBs	Aroclor 1248	WB	3	0	19	19	9.5	0.00
48	PCBs	Aroclor 1254	FS	3	3	29	69	51	20
48	PCBs	Aroclor 1254	WB	3	3	36	58	44	12
48	PCBs	Aroclor 1260	FS	3	3	57	130	100	40
48	PCBs	Aroclor 1260	WB	3	3	81	140	100	33
48	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Aldrin	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Alpha-BHC	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Alpha-Chlordane	FS	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Alpha-Chlordane	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Beta-BHC	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	3	2.6	7.4	5.4	2.5
48	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	3	2.4	7.6	4.6	2.7
48	Pesticides	cis-Nonachlor	FS	3	1	1.9	2.6	1.5	0.95
48	Pesticides	cis-Nonachlor	WB	3	3	2.3	2.5	2.4	0.12
48	Pesticides	DDD-o,p'	FS	3	3	15	31	24	8.3
48	Pesticides	DDD-o,p'	WB	3	3	18	28	22	5.3
48	Pesticides	DDE-o,p'	FS	3	3	7.4	13	9.3	3.2
48	Pesticides	DDE-o,p'	WB	3	3	4.8	7.5	6.3	1.4
48	Pesticides	DDT-o,p'	FS	3	3	3.5	14	8.8	5.3
48	Pesticides	DDT-o,p'	WB	3	2	1.9	6.9	4.7	3.3
48	Pesticides	DDD-p,p'	FS	3	3	41	150	100	56
48	Pesticides	DDD-p,p'	WB	3	3	58	100	81	21
48	Pesticides	DDE-p,p'	FS	3	3	620	1,300	1,000	350
48	Pesticides	DDE-p,p'	WB	3	3	520	900	730	190
48	Pesticides	DDT-p,p'	FS	3	3	17	87	49	35
48	Pesticides	DDT-p,p'	WB	3	3	30	45	40	8.7
48	Pesticides	DDMU	FS	3	3	30	69	50	20
48	Pesticides	DDMU	WB	3	3	28	43	36	7.6
48	Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Delta-BHC	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Endosulfan Sulfate	FS	3	3	1.9	3.1	2.6	0.61
48	Pesticides	Endosulfan Sulfate	WB	3	3	1.8	2.1	1.9	0.15
48	Pesticides	Gamma-Chlordane	FS	3	2	0.97	1.9	1.1	0.31
48	Pesticides	Gamma-Chlordane	WB	3	3	1.9	2.5	2.2	0.30

Appendix D-1: Site Summary Statistics
Channel Catfish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Pesticides	gamma-Chlordene	FS	3	0	1.9	2.0	0.97	0.029
48	Pesticides	gamma-Chlordene	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Heptachlor	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Heptachlor Epoxide	FS	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Hexachlorobenzene	FS	3	2	1.9	3.7	2.4	1.4
48	Pesticides	Hexachlorobenzene	WB	3	3	3.1	6.7	5.1	1.8
48	Pesticides	Lindane	FS	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Lindane	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Mirex	FS	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Mirex	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Oxychlordane	FS	3	3	1.0	1.2	1.1	0.12
48	Pesticides	Oxychlordane	WB	3	3	1.4	2.2	1.7	0.44
48	Pesticides	Pentachloroanisol	FS	3	2	0.99	1.9	1.0	0.078
48	Pesticides	Pentachloroanisol	WB	3	3	0.96	1.1	1.1	0.081
48	Pesticides	Toxaphene	FS	3	0	57	59	29	0.50
48	Pesticides	Toxaphene	WB	3	0	57	58	29	0.29
48	Pesticides	trans-Nonachlor	FS	3	3	5.8	13	9.9	3.7
48	Pesticides	trans-Nonachlor	WB	3	3	11	13	12	1.0
48	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	18	19	9.3	0.12
48	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	18	19	9.3	0.32
48	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	37	38	19	0.23
48	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	36	38	19	0.66
48	Semivolatiles	2-Chloronaphthalene	FS	3	0	18	19	9.3	0.12
48	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	19	9.3	0.32
48	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	Acenaphthene	FS	3	0	18	19	9.3	0.12
48	Semivolatiles	Acenaphthene	WB	3	0	18	19	9.3	0.32
48	Semivolatiles	Acenaphthylene	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	Acenaphthylene	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	Anthracene	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	Anthracene	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	18	19	9.3	0.12
48	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	19	9.3	0.32
48	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	18	19	9.3	0.12
48	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	19	9.3	0.32
48	Semivolatiles	Chrysene	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	Chrysene	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	18	19	9.3	0.12
48	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	19	9.3	0.32
48	Semivolatiles	Dibenzofuran	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	Dibenzofuran	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	Fluoranthene	FS	3	0	18	19	9.3	0.12
48	Semivolatiles	Fluoranthene	WB	3	0	18	19	9.3	0.32
48	Semivolatiles	9H-Fluorene	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	9H-Fluorene	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	Hexachloroethane	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	Hexachloroethane	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	18	19	9.3	0.12
48	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	19	9.3	0.32
48	Semivolatiles	Naphthalene	FS	3	0	15	20	8.7	1.3
48	Semivolatiles	Naphthalene	WB	3	0	12	15	6.8	0.67

Appendix D-1: Site Summary Statistics
Channel Catfish

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	Nitrobenzene	FS	3	0	9.2	9.4	4.6	0.058
48	Semivolatiles	Nitrobenzene	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	Phenanthrene	FS	3	0	9.2	9.8	4.7	0.15
48	Semivolatiles	Phenanthrene	WB	3	0	8.9	9.5	4.6	0.16
48	Semivolatiles	Pyrene	FS	3	0	18	19	9.3	0.12
48	Semivolatiles	Pyrene	WB	3	0	18	19	9.3	0.32
48	Semivolatiles	Retene	FS	3	0	18	19	9.3	0.12
48	Semivolatiles	Retene	WB	3	0	18	19	9.3	0.32

Appendix D-1: Site Summary Statistics
Smallmouth Bass

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	570	840	370	77
48	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	860	900	440	12
48	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	570	840	370	77
48	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	860	900	440	12
48	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	570	840	370	77
48	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	860	900	440	12
48	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	570	840	370	77
48	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	860	900	440	12
48	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	570	840	370	77
48	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	860	900	440	12
48	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	230	340	150	31
48	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	340	360	170	4.7
48	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	570	840	370	77
48	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	860	900	440	12
48	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	230	340	150	31
48	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	340	360	170	4.7
48	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	230	340	150	31
48	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	340	360	170	4.7
48	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	230	340	150	31
48	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	340	360	170	4.7
48	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	230	340	150	31
48	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	340	360	170	4.7
48	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	570	840	370	77
48	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	860	900	440	12
48	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	230	340	150	31
48	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	340	360	170	4.7
48	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	230	340	150	31
48	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	340	360	170	4.7
48	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	230	340	150	31
48	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	340	360	170	4.7
48	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	230	340	150	31
48	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	340	360	170	4.7
48	Guaiacols/Phenols	Phenol	FS	3	0	230	340	150	31
48	Guaiacols/Phenols	Phenol	WB	3	0	340	360	170	4.7
48	Metals	Aluminum	FS	3	3	5,000	8,100	6,500	1,500
48	Metals	Aluminum	WB	3	3	1,000	1,500	1,300	260
48	Metals	Antimony	FS	3	0	50	50	25	0.00
48	Metals	Antimony	WB	3	0	50	50	25	0.00
48	Metals	Arsenic	FS	3	3	110	170	140	31
48	Metals	Arsenic	WB	3	3	160	170	170	5.8
48	Metals	Barium	FS	3	3	360	610	490	130
48	Metals	Barium	WB	3	3	550	960	740	210
48	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
48	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
48	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
48	Metals	Cadmium	WB	3	3	4.8	19	12	7.1
48	Metals	Chromium	FS	3	3	220	330	280	57
48	Metals	Chromium	WB	3	2	100	230	140	90
48	Metals	Cobalt	FS	3	3	14	16	15	1.2
48	Metals	Cobalt	WB	3	3	120	190	140	40
48	Metals	Copper	FS	3	3	510	560	540	28
48	Metals	Copper	WB	3	3	500	560	520	31
48	Metals	Lead	FS	3	2	10	55	28	25
48	Metals	Lead	WB	3	3	10	140	66	64
48	Metals	Manganese	FS	3	3	750	1,100	870	180
48	Metals	Manganese	WB	3	3	2,000	2,400	2,300	240
48	Metals	Mercury	FS	3	3	380	470	420	48
48	Metals	Mercury	WB	3	3	220	360	300	69
48	Metals	Nickel	FS	3	3	130	340	200	120
48	Metals	Nickel	WB	3	3	54	96	76	21
48	Metals	Selenium	FS	3	3	450	530	490	39
48	Metals	Selenium	WB	3	3	480	710	590	110
48	Metals	Silver	FS	3	0	100	100	50	0.00
48	Metals	Silver	WB	3	0	100	100	50	0.00
48	Metals	Thallium	FS	3	0	50	50	25	0.00
48	Metals	Thallium	WB	3	0	50	50	25	0.00
48	Metals	Vanadium	FS	3	1	10	14	8.0	5.2
48	Metals	Vanadium	WB	3	3	19	88	63	38
48	Metals	Zinc	FS	3	3	9,200	10,000	9,700	430
48	Metals	Zinc	WB	3	3	15,000	18,000	17,000	1,300
48	PCBs	Aroclor 1016	FS	3	0	18	23	10	1.3
48	PCBs	Aroclor 1016	WB	3	0	18	20	9.7	0.58
48	PCBs	Aroclor 1221	FS	3	0	18	23	10	1.3
48	PCBs	Aroclor 1221	WB	3	0	18	20	9.7	0.58
48	PCBs	Aroclor 1232	FS	3	0	18	23	10	1.3
48	PCBs	Aroclor 1232	WB	3	0	18	20	9.7	0.58

Appendix D-1: Site Summary Statistics
Smallmouth Bass

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	PCBs	Aroclor 1242	FS	3	0	18	23	10	1.3
48	PCBs	Aroclor 1242	WB	3	0	18	20	9.7	0.58
48	PCBs	Aroclor 1248	FS	3	0	18	23	10	1.3
48	PCBs	Aroclor 1248	WB	3	0	18	20	9.7	0.58
48	PCBs	Aroclor 1254	FS	3	3	38	83	55	25
48	PCBs	Aroclor 1254	WB	3	3	46	94	66	25
48	PCBs	Aroclor 1260	FS	3	3	68	220	120	87
48	PCBs	Aroclor 1260	WB	3	3	80	190	130	56
48	Pesticides	Aldrin	FS	3	0	1.8	2.3	1.0	0.13
48	Pesticides	Aldrin	WB	3	0	1.8	2.0	0.97	0.058
48	Pesticides	Alpha-BHC	FS	3	0	1.8	2.3	1.0	0.13
48	Pesticides	Alpha-BHC	WB	3	0	1.8	2.0	0.97	0.058
48	Pesticides	Alpha-Chlordene	FS	3	0	1.8	2.3	1.0	0.13
48	Pesticides	Alpha-Chlordene	WB	3	0	1.8	2.0	0.97	0.058
48	Pesticides	Beta-BHC	FS	3	0	1.8	2.3	1.0	0.13
48	Pesticides	Beta-BHC	WB	3	0	1.8	2.0	0.97	0.058
48	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	1	1.8	4.1	2.1	1.8
48	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	2	2.0	4.7	3.1	1.9
48	Pesticides	cis-Nonachlor	FS	3	0	1.8	2.3	1.0	0.13
48	Pesticides	cis-Nonachlor	WB	3	1	1.4	2.0	1.1	0.26
48	Pesticides	DDD-o,p'	FS	3	3	11	20	15	4.5
48	Pesticides	DDD-o,p'	WB	3	3	18	27	21	4.9
48	Pesticides	DDE-o,p'	FS	3	3	5.2	9.4	6.7	2.3
48	Pesticides	DDE-o,p'	WB	3	3	10	14	12	2.0
48	Pesticides	DDT-o,p'	FS	3	3	5.7	18	9.9	7.0
48	Pesticides	DDT-o,p'	WB	3	3	12	20	17	4.4
48	Pesticides	DDD-p,p'	FS	3	3	30	85	51	30
48	Pesticides	DDD-p,p'	WB	3	3	40	63	54	12
48	Pesticides	DDE-p,p'	FS	3	3	480	1,200	770	380
48	Pesticides	DDE-p,p'	WB	3	3	970	1,700	1,300	370
48	Pesticides	DDT-p,p'	FS	3	3	23	48	34	13
48	Pesticides	DDT-p,p'	WB	3	3	44	80	62	18
48	Pesticides	DDMU	FS	3	3	20	56	32	21
48	Pesticides	DDMU	WB	3	3	33	55	41	12
48	Pesticides	Delta-BHC	FS	3	0	1.8	2.3	1.0	0.13
48	Pesticides	Delta-BHC	WB	3	0	1.8	2.0	0.97	0.058
48	Pesticides	Endosulfan Sulfate	FS	3	3	1.5	3.0	2.1	0.78
48	Pesticides	Endosulfan Sulfate	WB	3	3	2.4	5.6	3.8	1.6
48	Pesticides	Gamma-Chlordane	FS	3	1	1.8	14	5.4	7.5
48	Pesticides	Gamma-Chlordane	WB	3	0	1.8	2.0	0.97	0.058
48	Pesticides	gamma-Chlordene	FS	3	0	1.8	2.3	1.0	0.13
48	Pesticides	gamma-Chlordene	WB	3	0	1.8	2.0	0.97	0.058
48	Pesticides	Heptachlor	FS	3	0	1.8	2.3	1.0	0.13
48	Pesticides	Heptachlor	WB	3	0	1.8	2.0	0.97	0.058
48	Pesticides	Heptachlor Epoxide	FS	3	0	1.8	2.3	1.0	0.13
48	Pesticides	Heptachlor Epoxide	WB	3	0	1.8	2.0	0.97	0.058
48	Pesticides	Hexachlorobenzene	FS	3	1	1.8	2.4	1.5	0.80
48	Pesticides	Hexachlorobenzene	WB	3	3	1.1	1.4	1.2	0.15
48	Pesticides	Lindane	FS	3	0	1.8	2.3	1.0	0.13
48	Pesticides	Lindane	WB	3	0	1.8	2.0	0.97	0.058
48	Pesticides	Mirex	FS	3	0	1.8	2.3	1.0	0.13
48	Pesticides	Mirex	WB	3	0	1.8	2.0	0.97	0.058
48	Pesticides	Oxychlordane	FS	3	1	1.6	2.3	1.2	0.35
48	Pesticides	Oxychlordane	WB	3	3	1.4	2.6	1.8	0.67
48	Pesticides	Pentachloroanisol	FS	3	1	0.79	2.3	0.95	0.18
48	Pesticides	Pentachloroanisol	WB	3	1	0.99	2.0	0.96	0.055
48	Pesticides	Toxaphene	FS	3	0	54	68	30	3.5
48	Pesticides	Toxaphene	WB	3	0	55	60	29	1.3
48	Pesticides	trans-Nonachlor	FS	3	3	2.6	8.6	4.7	3.4
48	Pesticides	trans-Nonachlor	WB	3	3	7.1	14	10	3.5
48	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	11	17	7.5	1.5
48	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	17	18	8.7	0.24
48	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	23	34	15	3.1
48	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	34	36	17	0.47
48	Semivolatiles	2-Chloronaphthalene	FS	3	0	11	17	7.5	1.5
48	Semivolatiles	2-Chloronaphthalene	WB	3	0	17	18	8.7	0.24
48	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	Acenaphthene	FS	3	0	11	17	7.5	1.5
48	Semivolatiles	Acenaphthene	WB	3	0	17	18	8.7	0.24

Appendix D-1: Site Summary Statistics
Smallmouth Bass

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Semivolatiles	Acenaphthylene	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	Acenaphthylene	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	Anthracene	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	Anthracene	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	Benzo(a)anthracene	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	Benzo(a)pyrene	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	11	17	7.5	1.5
48	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	17	18	8.7	0.24
48	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	11	17	7.5	1.5
48	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	17	18	8.7	0.24
48	Semivolatiles	Chrysene	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	Chrysene	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	11	17	7.5	1.5
48	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	17	18	8.7	0.24
48	Semivolatiles	Dibenzofuran	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	Dibenzofuran	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	Fluoranthene	FS	3	0	11	17	7.5	1.5
48	Semivolatiles	Fluoranthene	WB	3	0	17	18	8.7	0.24
48	Semivolatiles	9H-Fluorene	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	9H-Fluorene	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	Hexachlorobutadiene	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	Hexachloroethane	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	Hexachloroethane	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	11	17	7.5	1.5
48	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	17	18	8.7	0.24
48	Semivolatiles	Naphthalene	FS	3	0	10	17	6.3	1.8
48	Semivolatiles	Naphthalene	WB	3	0	9.4	24	8.4	3.7
48	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	Nitrobenzene	FS	3	0	5.7	8.4	3.8	0.78
48	Semivolatiles	Nitrobenzene	WB	3	0	8.6	9.0	4.4	0.12
48	Semivolatiles	Phenanthrene	FS	3	0	5.7	9.9	4.0	1.1
48	Semivolatiles	Phenanthrene	WB	3	1	8.6	16	8.2	6.8
48	Semivolatiles	Pyrene	FS	3	0	11	17	7.5	1.5
48	Semivolatiles	Pyrene	WB	3	0	17	18	8.7	0.24
48	Semivolatiles	Retene	FS	3	0	11	17	7.5	1.5
48	Semivolatiles	Retene	WB	3	0	17	18	8.7	0.24

Appendix D-1: Site Summary Statistics
Coho Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Dioxin/furans	2,3,7,8-TCDD	E	3	2	0.000010	0.000050	0.000035	0.000026
30	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000010	0.000040	0.000017	0.000020
30	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000010	0.000050	0.000017	0.000010
30	Dioxin/furans	1,2,3,7,8-PeCDD	E	3	1	0.000010	0.00010	0.000037	0.000055
30	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000010	0.000060	0.000038	0.000029
30	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.000010	0.000060	0.000020	0.000013
30	Dioxin/furans	1,2,3,4,7,8-HxCDD	E	3	1	0.000010	0.000010	0.0000067	0.0000029
30	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
30	Dioxin/furans	1,2,3,6,7,8-HxCDD	E	3	2	0.000010	0.000080	0.000048	0.000039
30	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	2	0.000010	0.000050	0.000035	0.000026
30	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
30	Dioxin/furans	1,2,3,7,8,9-HxCDD	E	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000010	0.000030	0.000013	0.000014
30	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	1	0.000020	0.000020	0.000013	0.0000058
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	E	3	3	0.000080	0.00021	0.00014	0.000065
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000010	0.00018	0.000095	0.000088
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	1	0.000010	0.000060	0.000030	0.000028
30	Dioxin/furans	OCDD	E	3	3	0.0013	0.0025	0.0018	0.00066
30	Dioxin/furans	OCDD	FS	3	3	0.000090	0.00085	0.00037	0.00042
30	Dioxin/furans	OCDD	WB	3	2	0.000010	0.00025	0.00014	0.00012
30	Dioxin/furans	2,3,7,8-TCDF	E	3	3	0.00029	0.00066	0.00051	0.00020
30	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00035	0.00054	0.00046	0.000097
30	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00036	0.00049	0.00044	0.000072
30	Dioxin/furans	1,2,3,7,8-PeCDF	E	3	1	0.000010	0.000030	0.000013	0.000014
30	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	0	0.000020	0.000030	0.000013	0.0000029
30	Dioxin/furans	2,3,4,7,8-PeCDF	E	3	2	0.000010	0.00010	0.000068	0.000055
30	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	2	0.000010	0.000090	0.000048	0.000043
30	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	2	0.000020	0.000080	0.000050	0.000036
30	Dioxin/furans	1,2,3,4,7,8-HxCDF	E	3	2	0.000010	0.000050	0.000025	0.000023
30	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
30	Dioxin/furans	1,2,3,6,7,8-HxCDF	E	3	1	0.000010	0.000030	0.000013	0.000014
30	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
30	Dioxin/furans	1,2,3,7,8,9-HxCDF	E	3	2	0.000010	0.000030	0.000022	0.000014
30	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
30	Dioxin/furans	2,3,4,6,7,8-HxCDF	E	3	1	0.000010	0.000040	0.000017	0.000020
30	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000010	0.000050	0.000028	0.000023
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000010	0.000030	0.000012	0.0000058
30	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	E	3	2	0.000010	0.000050	0.000032	0.000024
30	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000030	0.000012	0.0000058
30	Dioxin/furans	OCDF	E	3	2	0.000010	0.00022	0.00014	0.00011
30	Dioxin/furans	OCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
30	Dioxin/furans	OCDF	WB	3	0	0.000030	0.000060	0.000025	0.0000087
30	Guaiacols/Phenols	4-Chloroguaiacol	E	3	0	970	1,000	490	9.5
30	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	950	970	480	6.5
30	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	880	960	460	21
30	Guaiacols/Phenols	3,4-Dichloroguaiacol	E	3	0	970	1,000	490	9.5
30	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	950	970	480	6.5
30	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	880	960	460	21
30	Guaiacols/Phenols	4,5-Dichloroguaiacol	E	3	0	970	1,000	490	9.5
30	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	950	970	480	6.5
30	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	880	960	460	21
30	Guaiacols/Phenols	4,6-Dichloroguaiacol	E	3	0	970	1,000	490	9.5
30	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	950	970	480	6.5
30	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	880	960	460	21
30	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	E	3	0	970	1,000	490	9.5
30	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	950	970	480	6.5
30	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	880	960	460	21
30	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	E	3	0	390	400	200	3.8
30	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	380	390	190	2.5
30	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	350	390	180	8.5
30	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	E	3	0	970	1,000	490	9.5
30	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	950	970	480	6.5
30	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	880	960	460	21
30	Guaiacols/Phenols	Tetrachloroguaiacol	E	3	0	390	400	200	3.8
30	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	380	390	190	2.5
30	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	350	390	180	8.5
30	Guaiacols/Phenols	2-Chlorophenol	E	3	0	390	400	200	3.8

Appendix D-1: Site Summary Statistics
Coho Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	380	390	190	2.5
30	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	350	390	180	8.5
30	Guaiacols/Phenols	4-Chloro-3-methylphenol	E	3	0	390	400	200	3.8
30	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	380	390	190	2.5
30	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	350	390	180	8.5
30	Guaiacols/Phenols	2,4-Dichlorophenol	E	3	0	390	400	200	3.8
30	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	380	390	190	2.5
30	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	350	390	180	8.5
30	Guaiacols/Phenols	2,4-Dimethylphenol	E	3	0	970	1,000	490	9.5
30	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	950	970	480	6.5
30	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	880	960	460	21
30	Guaiacols/Phenols	2,4,5-Trichlorophenol	E	3	0	390	400	200	3.8
30	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	380	390	190	2.5
30	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	350	390	180	8.5
30	Guaiacols/Phenols	2,4,6-Trichlorophenol	E	3	0	390	400	200	3.8
30	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	380	390	190	2.5
30	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	350	390	180	8.5
30	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	E	3	0	390	400	200	3.8
30	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	380	390	190	2.5
30	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	350	390	180	8.5
30	Guaiacols/Phenols	Pentachlorophenol	E	3	0	390	400	200	3.8
30	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	380	390	190	2.5
30	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	350	390	180	8.5
30	Guaiacols/Phenols	Phenol	E	3	0	390	400	200	3.8
30	Guaiacols/Phenols	Phenol	FS	3	0	380	390	190	2.5
30	Guaiacols/Phenols	Phenol	WB	3	0	350	390	180	8.5
30	Metals	Aluminum	E	3	1	1,000	1,600	850	610
30	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
30	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
30	Metals	Antimony	E	3	0	50	50	25	0.00
30	Metals	Antimony	FS	3	0	50	50	25	0.00
30	Metals	Antimony	WB	3	0	50	50	25	0.00
30	Metals	Arsenic	E	3	3	310	360	330	26
30	Metals	Arsenic	FS	3	3	450	600	540	78
30	Metals	Arsenic	WB	3	3	450	560	500	53
30	Metals	Barium	E	3	0	200	200	100	0.00
30	Metals	Barium	FS	3	1	200	270	160	98
30	Metals	Barium	WB	3	1	200	220	140	69
30	Metals	Beryllium	E	3	0	4.0	4.0	2.0	0.00
30	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
30	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
30	Metals	Cadmium	E	3	0	4.0	4.0	2.0	0.00
30	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
30	Metals	Cadmium	WB	3	3	19	27	22	4.2
30	Metals	Chromium	E	3	0	100	100	50	0.00
30	Metals	Chromium	FS	3	3	120	190	140	40
30	Metals	Chromium	WB	3	3	120	140	130	10
30	Metals	Cobalt	E	3	3	10	14	12	2.1
30	Metals	Cobalt	FS	3	3	110	140	120	14
30	Metals	Cobalt	WB	3	3	120	140	120	15
30	Metals	Copper	E	3	3	4,100	5,000	4,500	470
30	Metals	Copper	FS	3	3	680	3,600	1,700	1,600
30	Metals	Copper	WB	3	3	720	2,400	1,300	880
30	Metals	Lead	E	3	0	10	10	5.0	0.00
30	Metals	Lead	FS	3	2	10	230	81	120
30	Metals	Lead	WB	3	3	11	20	15	4.7
30	Metals	Manganese	E	3	3	630	790	700	83
30	Metals	Manganese	FS	3	3	120	330	190	110
30	Metals	Manganese	WB	3	3	390	560	500	94
30	Metals	Mercury	E	3	0	100	100	50	0.00
30	Metals	Mercury	FS	3	3	110	120	120	7.6
30	Metals	Mercury	WB	3	3	73	130	100	28
30	Metals	Nickel	E	3	3	35	150	84	57
30	Metals	Nickel	FS	3	2	30	100	54	44
30	Metals	Nickel	WB	3	3	53	3,400	1,200	1,900
30	Metals	Selenium	E	3	3	1,100	1,300	1,200	72
30	Metals	Selenium	FS	3	3	270	310	290	21
30	Metals	Selenium	WB	3	3	330	420	360	49
30	Metals	Silver	E	3	0	100	100	50	0.00
30	Metals	Silver	FS	3	0	100	100	50	0.00
30	Metals	Silver	WB	3	0	100	100	50	0.00
30	Metals	Thallium	E	3	0	50	50	25	0.00
30	Metals	Thallium	FS	3	0	50	50	25	0.00
30	Metals	Thallium	WB	3	0	50	50	25	0.00
30	Metals	Vanadium	E	3	3	17	41	28	12
30	Metals	Vanadium	FS	3	1	10	12	7.3	4.0

Appendix D-1: Site Summary Statistics
Coho Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Metals	Vanadium	WB	3	3	32	45	38	6.7
30	Metals	Zinc	E	3	3	30,000	34,000	31,000	2,200
30	Metals	Zinc	FS	3	3	6,700	7,800	7,100	590
30	Metals	Zinc	WB	3	3	28,000	32,000	30,000	2,000
30	PCBs	Aroclor 1016	E	3	0	19	19	9.5	0.00
30	PCBs	Aroclor 1016	FS	3	0	18	20	9.7	0.58
30	PCBs	Aroclor 1016	WB	3	0	18	20	9.5	0.50
30	PCBs	Aroclor 1221	E	3	0	19	19	9.5	0.00
30	PCBs	Aroclor 1221	FS	3	0	18	20	9.7	0.58
30	PCBs	Aroclor 1221	WB	3	0	18	20	9.5	0.50
30	PCBs	Aroclor 1232	E	3	0	19	19	9.5	0.00
30	PCBs	Aroclor 1232	FS	3	0	18	20	9.7	0.58
30	PCBs	Aroclor 1232	WB	3	0	18	20	9.5	0.50
30	PCBs	Aroclor 1242	E	3	0	19	19	9.5	0.00
30	PCBs	Aroclor 1242	FS	3	0	18	20	9.7	0.58
30	PCBs	Aroclor 1242	WB	3	0	18	20	9.5	0.50
30	PCBs	Aroclor 1248	E	3	0	19	19	9.5	0.00
30	PCBs	Aroclor 1248	FS	3	0	18	20	9.7	0.58
30	PCBs	Aroclor 1248	WB	3	0	18	20	9.5	0.50
30	PCBs	Aroclor 1254	E	3	3	11	17	15	3.5
30	PCBs	Aroclor 1254	FS	3	3	12	19	16	3.5
30	PCBs	Aroclor 1254	WB	3	3	18	19	19	0.58
30	PCBs	Aroclor 1260	E	3	0	19	19	9.5	0.00
30	PCBs	Aroclor 1260	FS	3	0	18	20	9.7	0.58
30	PCBs	Aroclor 1260	WB	3	0	18	20	9.5	0.50
30	PCBs	PCB 77	E	3	3	0.010	0.011	0.010	0.00030
30	PCBs	PCB 77	FS	3	3	0.0080	0.0084	0.0082	0.00017
30	PCBs	PCB 77	WB	3	3	0.0088	0.011	0.0099	0.0013
30	PCBs	PCB 105	E	3	3	0.27	0.35	0.32	0.041
30	PCBs	PCB 105	FS	3	3	0.27	0.31	0.30	0.026
30	PCBs	PCB 105	WB	3	3	0.29	0.33	0.31	0.020
30	PCBs	PCB 114	E	3	3	0.024	0.034	0.029	0.0053
30	PCBs	PCB 114	FS	3	3	0.024	0.032	0.028	0.0040
30	PCBs	PCB 114	WB	3	3	0.024	0.031	0.027	0.0036
30	PCBs	PCB 118	E	3	3	0.68	0.76	0.72	0.042
30	PCBs	PCB 118	FS	3	3	0.67	0.74	0.72	0.039
30	PCBs	PCB 118	WB	3	3	0.68	0.77	0.73	0.045
30	PCBs	PCB 123	E	3	3	0.011	0.013	0.012	0.0010
30	PCBs	PCB 123	FS	3	3	0.0094	0.015	0.012	0.0029
30	PCBs	PCB 123	WB	3	3	0.0088	0.011	0.0099	0.0012
30	PCBs	PCB 126	E	3	0	0.00077	0.0011	0.00048	0.000081
30	PCBs	PCB 126	FS	3	0	0.00085	0.0020	0.00071	0.00029
30	PCBs	PCB 126	WB	3	3	0.0031	0.0035	0.0033	0.00018
30	PCBs	PCB 156	E	3	3	0.082	0.10	0.089	0.0095
30	PCBs	PCB 156	FS	3	3	0.095	0.12	0.11	0.013
30	PCBs	PCB 156	WB	3	3	0.090	0.11	0.097	0.0075
30	PCBs	PCB 157	E	3	3	0.018	0.023	0.020	0.0030
30	PCBs	PCB 157	FS	3	3	0.021	0.026	0.022	0.0030
30	PCBs	PCB 157	WB	3	3	0.020	0.022	0.021	0.00085
30	PCBs	PCB 167	E	3	3	0.035	0.038	0.037	0.0015
30	PCBs	PCB 167	FS	3	3	0.045	0.051	0.047	0.0034
30	PCBs	PCB 167	WB	3	3	0.042	0.049	0.046	0.0041
30	PCBs	PCB 169	E	3	0	0.0010	0.0013	0.00055	0.000075
30	PCBs	PCB 169	FS	3	0	0.0010	0.0011	0.00052	0.000015
30	PCBs	PCB 169	WB	3	0	0.0010	0.0010	0.00050	0.00
30	PCBs	PCB 170	E	3	3	0.15	0.19	0.16	0.023
30	PCBs	PCB 170	FS	3	3	0.20	0.22	0.21	0.012
30	PCBs	PCB 170	WB	3	3	0.18	0.19	0.19	0.0035
30	PCBs	PCB 180	E	3	3	0.44	0.58	0.50	0.068
30	PCBs	PCB 180	FS	3	3	0.64	0.73	0.69	0.043
30	PCBs	PCB 180	WB	3	3	0.57	0.62	0.59	0.027
30	PCBs	PCB 189	E	3	3	0.0051	0.0068	0.0058	0.00088
30	PCBs	PCB 189	FS	3	3	0.0079	0.0091	0.0086	0.00060
30	PCBs	PCB 189	WB	3	3	0.0073	0.0079	0.0076	0.00031
30	Pesticides	Aldrin	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	Aldrin	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	Aldrin	WB	3	0	1.8	2.0	0.95	0.050
30	Pesticides	Alpha-BHC	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	Alpha-BHC	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	Alpha-BHC	WB	3	0	1.8	2.0	0.95	0.050
30	Pesticides	Alpha-Chlordene	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	Alpha-Chlordene	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	Alpha-Chlordene	WB	3	0	1.8	2.0	0.95	0.050
30	Pesticides	Beta-BHC	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	Beta-BHC	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	Beta-BHC	WB	3	0	1.8	2.0	0.95	0.050

Appendix D-1: Site Summary Statistics
Coho Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Pesticides	cis-Chlordane (alpha-Chlordane)	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.8	2.0	0.95	0.050
30	Pesticides	cis-Nonachlor	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	cis-Nonachlor	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	cis-Nonachlor	WB	3	0	1.8	2.0	0.95	0.050
30	Pesticides	DDD-o,p'	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	DDD-o,p'	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	DDD-o,p'	WB	3	0	1.8	2.0	0.95	0.050
30	Pesticides	DDE-o,p'	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	DDE-o,p'	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	DDE-o,p'	WB	3	0	1.8	2.0	0.95	0.050
30	Pesticides	DDT-o,p'	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	DDT-o,p'	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	DDT-o,p'	WB	3	0	1.8	2.0	0.95	0.050
30	Pesticides	DDD-p,p'	E	3	3	2.7	2.9	2.8	0.12
30	Pesticides	DDD-p,p'	FS	3	3	2.5	2.9	2.7	0.21
30	Pesticides	DDD-p,p'	WB	3	2	1.8	2.1	1.6	0.62
30	Pesticides	DDE-p,p'	E	3	3	31	33	32	1.0
30	Pesticides	DDE-p,p'	FS	3	3	29	35	33	3.2
30	Pesticides	DDE-p,p'	WB	3	3	31	37	35	3.5
30	Pesticides	DDT-p,p'	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	DDT-p,p'	FS	3	1	1.8	4.0	2.0	1.8
30	Pesticides	DDT-p,p'	WB	3	2	2.0	4.0	3.0	1.7
30	Pesticides	DDMU	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	DDMU	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	DDMU	WB	3	0	1.8	2.0	0.95	0.050
30	Pesticides	Delta-BHC	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	Delta-BHC	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	Delta-BHC	WB	3	0	1.8	2.0	0.95	0.050
30	Pesticides	Endosulfan Sulfate	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	2.0	0.95	0.071
30	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	0.00	na
30	Pesticides	Gamma-Chlordane	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	Gamma-Chlordane	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	Gamma-Chlordane	WB	3	0	1.8	2.0	0.95	0.050
30	Pesticides	Gamma-Chlordene	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	Gamma-Chlordene	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	Gamma-Chlordene	WB	3	0	1.8	2.0	0.95	0.050
30	Pesticides	Heptachlor	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	Heptachlor	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	Heptachlor	WB	3	0	1.8	2.0	0.95	0.050
30	Pesticides	Heptachlor Epoxide	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	Heptachlor Epoxide	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	Heptachlor Epoxide	WB	3	0	1.8	2.0	0.95	0.050
30	Pesticides	Hexachlorobenzene	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	Hexachlorobenzene	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	Hexachlorobenzene	WB	3	3	1.2	1.2	1.2	2.1E-08
30	Pesticides	Lindane	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	Lindane	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	Lindane	WB	3	0	1.8	2.0	0.95	0.050
30	Pesticides	Mirex	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	Mirex	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	Mirex	WB	3	0	1.8	2.0	0.95	0.050
30	Pesticides	Oxychlordane	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	Oxychlordane	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	Oxychlordane	WB	3	0	1.8	2.0	0.95	0.050
30	Pesticides	Pentachloroanisol	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	Pentachloroanisol	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	Pentachloroanisol	WB	3	0	1.8	2.0	0.95	0.050
30	Pesticides	Toxaphene	E	3	0	56	57	28	0.29
30	Pesticides	Toxaphene	FS	3	0	55	60	29	1.3
30	Pesticides	Toxaphene	WB	3	0	55	59	29	1.0
30	Pesticides	trans-Nonachlor	E	3	0	1.9	1.9	0.95	1.5E-08
30	Pesticides	trans-Nonachlor	FS	3	0	1.8	2.0	0.97	0.058
30	Pesticides	trans-Nonachlor	WB	3	0	1.8	2.0	0.95	0.050
30	Semivolatiles	1,2,4-Trichlorobenzene	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	1,2-Diphenylhydrazine	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	2,4-Dinitrotoluene	E	3	0	19	20	9.7	0.23
30	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	19	150	32	39
30	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	140	150	74	3.3
30	Semivolatiles	2,6-Dinitrotoluene	E	3	0	38	40	19	0.46

Appendix D-1: Site Summary Statistics
Coho Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	38	39	19	0.20
30	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	35	39	18	0.85
30	Semivolatiles	2-Chloronaphthalene	E	3	0	19	20	9.7	0.23
30	Semivolatiles	2-Chloronaphthalene	FS	3	0	19	19	9.6	0.10
30	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	19	9.2	0.40
30	Semivolatiles	4-Bromophenyl-Phenylether	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	4-Chlorophenyl-Phenylether	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	Acenaphthene	E	3	0	19	20	9.7	0.23
30	Semivolatiles	Acenaphthene	FS	3	0	19	19	9.6	0.10
30	Semivolatiles	Acenaphthene	WB	3	0	18	19	9.2	0.40
30	Semivolatiles	Acenaphthylene	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	Acenaphthylene	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	Acenaphthylene	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	Anthracene	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	Anthracene	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	Anthracene	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	Benzene, 1,2-dichloro-	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	Benzene, 1,3-dichloro-	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	Benzene, 1,4-dichloro-	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	Benzo(a)anthracene	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	Benzo(a)pyrene	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	Benzo(g,h,i)perylene	E	3	0	19	20	9.7	0.23
30	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	19	19	9.6	0.10
30	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	19	9.2	0.40
30	Semivolatiles	Benzo[b]fluoranthene	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	Benzo[b]fluoranthene	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	Benzo[b]fluoranthene	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	Benzo[k]fluoranthene	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	bis(2-Chloroisopropyl)ether	E	3	0	19	20	9.7	0.23
30	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	19	19	9.6	0.10
30	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	19	9.2	0.40
30	Semivolatiles	Chrysene	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	Chrysene	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	Chrysene	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	Dibenz[a,h]anthracene	E	3	0	19	20	9.7	0.23
30	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	19	19	9.6	0.10
30	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	19	9.2	0.40
30	Semivolatiles	Dibenzofuran	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	Dibenzofuran	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	Dibenzofuran	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	Fluoranthene	E	3	0	19	20	9.7	0.23
30	Semivolatiles	Fluoranthene	FS	3	0	19	19	9.6	0.10
30	Semivolatiles	Fluoranthene	WB	3	0	18	19	9.2	0.40
30	Semivolatiles	9H-Fluorene	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	9H-Fluorene	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	9H-Fluorene	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	Hexachlorobutadiene	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	Hexachloroethane	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	Hexachloroethane	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	Hexachloroethane	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	Indeno(1,2,3-cd)pyrene	E	3	0	19	20	9.7	0.23
30	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	19	19	9.6	0.10
30	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	19	9.2	0.40
30	Semivolatiles	Naphthalene	E	3	0	21	24	11	0.75
30	Semivolatiles	Naphthalene	FS	3	0	17	26	11	2.6
30	Semivolatiles	Naphthalene	WB	3	0	18	19	9.1	0.31
30	Semivolatiles	Naphthalene, 1-methyl-	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.5	9.7	4.8	0.050

Appendix D-1: Site Summary Statistics
Coho Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	Naphthalene, 2-methyl-	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	Nitrobenzene	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	Nitrobenzene	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	Nitrobenzene	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	Phenanthrene	E	3	0	9.6	10	4.9	0.12
30	Semivolatiles	Phenanthrene	FS	3	0	9.5	9.7	4.8	0.050
30	Semivolatiles	Phenanthrene	WB	3	0	8.8	9.6	4.6	0.20
30	Semivolatiles	Pyrene	E	3	0	19	20	9.7	0.23
30	Semivolatiles	Pyrene	FS	3	0	19	19	9.6	0.10
30	Semivolatiles	Pyrene	WB	3	0	18	19	9.2	0.40
30	Semivolatiles	Retene	E	3	0	19	20	9.7	0.23
30	Semivolatiles	Retene	FS	3	0	19	19	9.6	0.10
30	Semivolatiles	Retene	WB	3	0	18	19	9.2	0.40

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Dioxin/furans	2,3,7,8-TCDD	E	1	0	0.000040	0.000040	0.000020	na
8	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000010	0.000025	0.000013	0.0000090
8	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000020	0.000040	0.000015	0.0000050
8	Dioxin/furans	1,2,3,7,8-PeCDD	E	1	0	0.000040	0.000040	0.000020	na
8	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	0	0.000020	0.000040	0.000013	0.0000058
8	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.000040	0.000060	0.000025	0.0000050
8	Dioxin/furans	1,2,3,4,7,8-HxCDD	E	1	0	0.000010	0.000010	0.0000050	na
8	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000010	0.000015	0.0000058	0.0000014
8	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000030	0.000040	0.000018	0.0000029
8	Dioxin/furans	1,2,3,6,7,8-HxCDD	E	1	0	0.000010	0.000010	0.0000050	na
8	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	2	0.000010	0.000050	0.000025	0.000023
8	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	0	0.000030	0.000040	0.000018	0.0000029
8	Dioxin/furans	1,2,3,7,8,9-HxCDD	E	1	0	0.000010	0.000010	0.0000050	na
8	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	0	0.000010	0.000015	0.0000058	0.0000014
8	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	0	0.000030	0.000040	0.000018	0.0000029
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	E	1	1	0.000050	0.000050	0.000050	na
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000010	0.000030	0.000019	0.000013
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	0	0.000030	0.000040	0.000017	0.0000029
8	Dioxin/furans	OCDD	E	1	1	0.00028	0.00028	0.00028	na
8	Dioxin/furans	OCDD	FS	3	2	0.000010	0.00011	0.000060	0.000053
8	Dioxin/furans	OCDD	WB	3	1	0.000050	0.00055	0.00020	0.00030
8	Dioxin/furans	2,3,7,8-TCDF	E	1	1	0.00043	0.00043	0.00043	na
8	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00065	0.00079	0.00074	0.000079
8	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00043	0.00060	0.00054	0.000093
8	Dioxin/furans	1,2,3,7,8-PeCDF	E	1	0	0.000030	0.000030	0.000015	na
8	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	0	0.000020	0.000030	0.000012	0.0000029
8	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	0	0.000030	0.000040	0.000017	0.0000029
8	Dioxin/furans	2,3,4,7,8-PeCDF	E	1	0	0.000030	0.000030	0.000015	na
8	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	1	0.000020	0.000060	0.000027	0.000025
8	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	0	0.000030	0.000040	0.000017	0.0000029
8	Dioxin/furans	1,2,3,4,7,8-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
8	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000010	0.000040	0.000010	0.0000087
8	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	0	0.000030	0.000050	0.000020	0.0000050
8	Dioxin/furans	1,2,3,6,7,8-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
8	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	0	0.000010	0.000040	0.000010	0.0000087
8	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	0	0.000030	0.000050	0.000020	0.0000050
8	Dioxin/furans	1,2,3,7,8,9-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
8	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000040	0.000010	0.0000087
8	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000030	0.000050	0.000020	0.0000050
8	Dioxin/furans	2,3,4,6,7,8-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
8	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000010	0.000040	0.000010	0.0000087
8	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	0	0.000030	0.000050	0.000020	0.0000050
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	E	1	0	0.000020	0.000020	0.000010	na
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000010	0.000015	0.0000058	0.0000014
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000020	0.000030	0.000013	0.0000029
8	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	E	1	0	0.000020	0.000020	0.000010	na
8	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000015	0.0000058	0.0000014
8	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000020	0.000030	0.000013	0.0000029
8	Dioxin/furans	OCDF	E	1	0	0.000050	0.000050	0.000025	na
8	Dioxin/furans	OCDF	FS	3	0	0.000030	0.000070	0.000023	0.000010
8	Dioxin/furans	OCDF	WB	3	0	0.000070	0.000090	0.000040	0.0000050
8	Guaiacols/Phenols	4-Chloroguaiacol	E	1	0	960	960	480	na
8	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	880	990	470	28
8	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	940	980	480	9.6
8	Guaiacols/Phenols	3,4-Dichloroguaiacol	E	1	0	960	960	480	na
8	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	880	990	470	28
8	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	940	980	480	9.6
8	Guaiacols/Phenols	4,5-Dichloroguaiacol	E	1	0	960	960	480	na
8	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	880	990	470	28
8	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	940	980	480	9.6
8	Guaiacols/Phenols	4,6-Dichloroguaiacol	E	1	0	960	960	480	na
8	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	880	990	470	28
8	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	940	980	480	9.6
8	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	E	1	0	960	960	480	na
8	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	880	990	470	28
8	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	940	980	480	9.6
8	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	E	1	0	390	390	190	na
8	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	350	390	190	11
8	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	380	390	190	3.8
8	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	E	1	0	960	960	480	na
8	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	880	990	470	28
8	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	940	980	480	9.6
8	Guaiacols/Phenols	Tetrachloroguaiacol	E	1	0	390	390	190	na
8	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	350	390	190	11
8	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	380	390	190	3.8
8	Guaiacols/Phenols	2-Chlorophenol	E	1	0	390	390	190	na

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	350	390	190	11
8	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	380	390	190	3.8
8	Guaiacols/Phenols	4-Chloro-3-methylphenol	E	1	0	390	390	190	na
8	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	350	390	190	11
8	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	380	390	190	3.8
8	Guaiacols/Phenols	2,4-Dichlorophenol	E	1	0	390	390	190	na
8	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	350	390	190	11
8	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	380	390	190	3.8
8	Guaiacols/Phenols	2,4-Dimethylphenol	E	1	0	960	960	480	na
8	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	880	990	470	28
8	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	940	980	480	9.6
8	Guaiacols/Phenols	2,4,5-Trichlorophenol	E	1	0	390	390	190	na
8	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	350	390	190	11
8	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	380	390	190	3.8
8	Guaiacols/Phenols	2,4,6-Trichlorophenol	E	1	0	390	390	190	na
8	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	350	390	190	11
8	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	380	390	190	3.8
8	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	E	1	0	390	390	190	na
8	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	350	390	190	11
8	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	380	390	190	3.8
8	Guaiacols/Phenols	Pentachlorophenol	E	1	0	390	390	190	na
8	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	350	390	190	11
8	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	380	390	190	3.8
8	Guaiacols/Phenols	Phenol	E	1	0	390	390	190	na
8	Guaiacols/Phenols	Phenol	FS	3	0	350	390	190	11
8	Guaiacols/Phenols	Phenol	WB	3	0	380	390	190	3.8
8	Metals	Aluminum	E	1	0	1,000	1,000	500	na
8	Metals	Aluminum	FS	3	1	1,000	1,500	730	400
8	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
8	Metals	Antimony	E	1	0	50	50	25	na
8	Metals	Antimony	FS	3	0	50	50	25	0.00
8	Metals	Antimony	WB	3	0	50	50	25	0.00
8	Metals	Arsenic	E	1	1	240	240	240	na
8	Metals	Arsenic	FS	3	3	860	1,100	1,000	120
8	Metals	Arsenic	WB	3	3	810	900	860	43
8	Metals	Barium	E	1	0	200	200	100	na
8	Metals	Barium	FS	3	0	200	200	100	0.00
8	Metals	Barium	WB	3	0	200	200	100	0.00
8	Metals	Beryllium	E	1	0	4.0	4.0	2.0	na
8	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
8	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
8	Metals	Cadmium	E	1	0	4.0	4.0	2.0	na
8	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
8	Metals	Cadmium	WB	3	3	4.6	8.2	6.0	2.0
8	Metals	Chromium	E	1	0	100	100	50	na
8	Metals	Chromium	FS	3	0	100	100	50	0.00
8	Metals	Chromium	WB	3	0	100	100	50	0.00
8	Metals	Cobalt	E	1	1	35	35	35	na
8	Metals	Cobalt	FS	3	3	3.1	3.7	3.4	0.28
8	Metals	Cobalt	WB	3	3	120	130	130	7.8
8	Metals	Copper	E	1	1	5,800	5,800	5,800	na
8	Metals	Copper	FS	3	3	560	630	590	37
8	Metals	Copper	WB	3	3	4,800	6,600	5,700	890
8	Metals	Lead	E	1	0	10	10	5.0	na
8	Metals	Lead	FS	3	0	10	10	5.0	0.00
8	Metals	Lead	WB	3	3	340	520	430	93
8	Metals	Manganese	E	1	1	960	960	960	na
8	Metals	Manganese	FS	3	3	79	91	86	6.2
8	Metals	Manganese	WB	3	3	330	360	340	18
8	Metals	Mercury	E	1	0	50	50	25	na
8	Metals	Mercury	FS	3	3	62	120	84	35
8	Metals	Mercury	WB	3	1	50	200	83	100
8	Metals	Nickel	E	1	1	54	54	54	na
8	Metals	Nickel	FS	3	2	30	35	25	8.8
8	Metals	Nickel	WB	3	3	84	180	130	48
8	Metals	Selenium	E	1	1	2,400	2,400	2,400	na
8	Metals	Selenium	FS	3	3	330	370	350	22
8	Metals	Selenium	WB	3	3	450	550	500	51
8	Metals	Silver	E	1	0	100	100	50	na
8	Metals	Silver	FS	3	0	100	100	50	0.00
8	Metals	Silver	WB	3	0	100	100	50	0.00
8	Metals	Thallium	E	1	0	50	50	25	na
8	Metals	Thallium	FS	3	0	50	50	25	0.00
8	Metals	Thallium	WB	3	0	50	50	25	0.00
8	Metals	Vanadium	E	1	1	19	19	19	na
8	Metals	Vanadium	FS	3	0	10	10	5.0	0.00

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Metals	Vanadium	WB	3	3	16	18	17	1.2
8	Metals	Zinc	E	1	1	36,000	36,000	36,000	na
8	Metals	Zinc	FS	3	3	5,700	6,800	6,100	620
8	Metals	Zinc	WB	3	3	27,000	34,000	30,000	3,300
8	PCBs	Aroclor 1016	E	1	0	19	19	9.5	na
8	PCBs	Aroclor 1016	FS	3	0	19	20	9.8	0.29
8	PCBs	Aroclor 1016	WB	3	0	19	20	9.7	0.29
8	PCBs	Aroclor 1221	E	1	0	19	19	9.5	na
8	PCBs	Aroclor 1221	FS	3	0	19	20	9.8	0.29
8	PCBs	Aroclor 1221	WB	3	0	19	20	9.7	0.29
8	PCBs	Aroclor 1232	E	1	0	19	19	9.5	na
8	PCBs	Aroclor 1232	FS	3	0	19	20	9.8	0.29
8	PCBs	Aroclor 1232	WB	3	0	19	20	9.7	0.29
8	PCBs	Aroclor 1242	E	1	0	19	19	9.5	na
8	PCBs	Aroclor 1242	FS	3	0	19	20	9.8	0.29
8	PCBs	Aroclor 1242	WB	3	0	19	20	9.7	0.29
8	PCBs	Aroclor 1248	E	1	0	19	19	9.5	na
8	PCBs	Aroclor 1248	FS	3	0	19	20	9.8	0.29
8	PCBs	Aroclor 1248	WB	3	0	19	20	9.7	0.29
8	PCBs	Aroclor 1254	E	1	1	12	12	12	na
8	PCBs	Aroclor 1254	FS	3	3	14	21	17	3.5
8	PCBs	Aroclor 1254	WB	3	3	12	22	16	5.5
8	PCBs	Aroclor 1260	E	1	0	19	19	9.5	na
8	PCBs	Aroclor 1260	FS	3	0	19	20	9.8	0.29
8	PCBs	Aroclor 1260	WB	3	0	19	20	9.7	0.29
8	PCBs	PCB 77	E	1	1	0.0046	0.0046	0.0046	na
8	PCBs	PCB 77	FS	3	3	0.0053	0.0063	0.0059	0.00048
8	PCBs	PCB 77	WB	3	3	0.0055	0.0070	0.0063	0.00077
8	PCBs	PCB 105	E	1	1	0.11	0.11	0.11	na
8	PCBs	PCB 105	FS	3	3	0.18	0.25	0.22	0.033
8	PCBs	PCB 105	WB	3	3	0.12	0.14	0.13	0.012
8	PCBs	PCB 114	E	1	1	0.0098	0.0098	0.0098	na
8	PCBs	PCB 114	FS	3	3	0.016	0.020	0.018	0.0019
8	PCBs	PCB 114	WB	3	3	0.013	0.014	0.014	0.00074
8	PCBs	PCB 118	E	1	1	0.25	0.25	0.25	na
8	PCBs	PCB 118	FS	3	3	0.41	0.53	0.48	0.065
8	PCBs	PCB 118	WB	3	3	0.29	0.34	0.32	0.028
8	PCBs	PCB 123	E	1	1	0.0049	0.0049	0.0049	na
8	PCBs	PCB 123	FS	3	3	0.0080	0.0090	0.0085	0.00055
8	PCBs	PCB 123	WB	3	3	0.0061	0.0067	0.0065	0.00030
8	PCBs	PCB 126	E	1	0	0.00050	0.00050	0.00025	na
8	PCBs	PCB 126	FS	3	3	0.0012	0.0021	0.0016	0.00052
8	PCBs	PCB 126	WB	3	1	0.00062	0.0016	0.00081	0.00066
8	PCBs	PCB 156	E	1	1	0.012	0.012	0.012	na
8	PCBs	PCB 156	FS	3	3	0.033	0.048	0.040	0.0074
8	PCBs	PCB 156	WB	3	3	0.021	0.026	0.023	0.0026
8	PCBs	PCB 157	E	1	1	0.0043	0.0043	0.0043	na
8	PCBs	PCB 157	FS	3	3	0.0093	0.015	0.012	0.0028
8	PCBs	PCB 157	WB	3	3	0.0057	0.0076	0.0067	0.00096
8	PCBs	PCB 167	E	1	1	0.0099	0.0099	0.0099	na
8	PCBs	PCB 167	FS	3	3	0.022	0.025	0.024	0.0020
8	PCBs	PCB 167	WB	3	3	0.014	0.016	0.015	0.0012
8	PCBs	PCB 169	E	1	0	0.0010	0.0010	0.00050	na
8	PCBs	PCB 169	FS	3	0	0.0010	0.0010	0.00050	0.00
8	PCBs	PCB 169	WB	3	0	0.0010	0.0010	0.00050	0.00
8	PCBs	PCB 170	E	1	1	0.029	0.029	0.029	na
8	PCBs	PCB 170	FS	3	3	0.077	0.11	0.093	0.016
8	PCBs	PCB 170	WB	3	3	0.044	0.049	0.047	0.0024
8	PCBs	PCB 180	E	1	1	0.095	0.095	0.095	na
8	PCBs	PCB 180	FS	3	3	0.26	0.37	0.31	0.055
8	PCBs	PCB 180	WB	3	3	0.15	0.17	0.16	0.011
8	PCBs	PCB 189	E	1	0	0.0010	0.0010	0.00050	na
8	PCBs	PCB 189	FS	3	3	0.0031	0.0049	0.0039	0.00094
8	PCBs	PCB 189	WB	3	2	0.0010	0.0022	0.0013	0.00083
8	Pesticides	Aldrin	E	1	0	1.9	1.9	0.95	na
8	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Aldrin	WB	3	0	1.9	2.0	0.97	0.029
8	Pesticides	Alpha-BHC	E	1	0	1.9	1.9	0.95	na
8	Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Alpha-BHC	WB	3	0	1.9	2.0	0.97	0.029
8	Pesticides	Alpha-Chlordene	E	1	0	1.9	1.9	0.95	na
8	Pesticides	Alpha-Chlordene	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Alpha-Chlordene	WB	3	0	1.9	2.0	0.97	0.029
8	Pesticides	Beta-BHC	E	1	0	1.9	1.9	0.95	na
8	Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Beta-BHC	WB	3	0	1.9	2.0	0.97	0.029

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Pesticides	cis-Chlordane (alpha-Chlordane)	E	1	1	1.7	1.7	1.7	na
8	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	2	1.2	2.0	1.4	0.47
8	Pesticides	cis-Nonachlor	E	1	0	1.9	1.9	0.95	na
8	Pesticides	cis-Nonachlor	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	cis-Nonachlor	WB	3	1	1.2	2.0	1.1	0.13
8	Pesticides	DDD-o,p'	E	1	0	1.9	1.9	0.95	na
8	Pesticides	DDD-o,p'	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	DDD-o,p'	WB	3	0	1.9	2.0	0.97	0.029
8	Pesticides	DDE-o,p'	E	1	0	1.9	1.9	0.95	na
8	Pesticides	DDE-o,p'	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	DDE-o,p'	WB	3	0	1.9	2.0	0.97	0.029
8	Pesticides	DDT-o,p'	E	1	0	1.9	1.9	0.95	na
8	Pesticides	DDT-o,p'	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	DDT-o,p'	WB	3	0	1.9	2.0	0.97	0.029
8	Pesticides	DDD-p,p'	E	1	1	3.7	3.7	3.7	na
8	Pesticides	DDD-p,p'	FS	3	3	2.8	3.2	2.9	0.25
8	Pesticides	DDD-p,p'	WB	3	3	2.8	3.1	2.9	0.17
8	Pesticides	DDE-p,p'	E	1	1	6.6	6.6	6.6	na
8	Pesticides	DDE-p,p'	FS	3	3	9.7	14	11	2.4
8	Pesticides	DDE-p,p'	WB	3	3	5.5	7.7	6.5	1.1
8	Pesticides	DDT-p,p'	E	1	0	1.9	1.9	0.95	na
8	Pesticides	DDT-p,p'	FS	3	1	1.9	2.0	1.3	0.59
8	Pesticides	DDT-p,p'	WB	3	0	1.9	2.0	0.97	0.029
8	Pesticides	DDMU	E	1	0	1.9	1.9	0.95	na
8	Pesticides	DDMU	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	DDMU	WB	3	1	1.4	2.0	1.1	0.25
8	Pesticides	Delta-BHC	E	1	0	1.9	1.9	0.95	na
8	Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Delta-BHC	WB	3	0	1.9	2.0	0.97	0.029
8	Pesticides	Endosulfan Sulfate	E	1	0	1.9	1.9	0.95	na
8	Pesticides	Endosulfan Sulfate	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Endosulfan Sulfate	WB	2	0	1.9	1.9	0.95	na
8	Pesticides	Gamma-Chlordane	E	1	0	1.9	1.9	0.95	na
8	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Gamma-Chlordane	WB	3	0	1.9	2.0	0.97	0.029
8	Pesticides	gamma-Chlordene	E	1	0	1.9	1.9	0.95	na
8	Pesticides	gamma-Chlordene	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	gamma-Chlordene	WB	3	0	1.9	2.0	0.97	0.029
8	Pesticides	Heptachlor	E	1	0	1.9	1.9	0.95	na
8	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Heptachlor	WB	3	0	1.9	2.0	0.97	0.029
8	Pesticides	Heptachlor Epoxide	E	1	0	1.9	1.9	0.95	na
8	Pesticides	Heptachlor Epoxide	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Heptachlor Epoxide	WB	2	0	1.9	1.9	0.95	na
8	Pesticides	Hexachlorobenzene	E	1	1	4.3	4.3	4.3	na
8	Pesticides	Hexachlorobenzene	FS	3	3	2.1	2.3	2.2	0.14
8	Pesticides	Hexachlorobenzene	WB	3	3	3.1	4.5	3.6	0.78
8	Pesticides	Lindane	E	1	0	1.9	1.9	0.95	na
8	Pesticides	Lindane	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Lindane	WB	3	0	1.9	2.0	0.97	0.029
8	Pesticides	Mirex	E	1	0	1.9	1.9	0.95	na
8	Pesticides	Mirex	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Mirex	WB	3	0	1.9	2.0	0.97	0.029
8	Pesticides	Oxychlordane	E	1	0	1.9	1.9	0.95	na
8	Pesticides	Oxychlordane	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Oxychlordane	WB	3	0	1.9	2.0	0.97	0.029
8	Pesticides	Pentachloroanisol	E	1	0	1.9	1.9	0.95	na
8	Pesticides	Pentachloroanisol	FS	3	0	1.9	2.0	0.98	0.029
8	Pesticides	Pentachloroanisol	WB	3	0	1.9	2.0	0.97	0.029
8	Pesticides	Toxaphene	E	1	0	58	58	29	na
8	Pesticides	Toxaphene	FS	3	0	58	60	29	0.38
8	Pesticides	Toxaphene	WB	3	0	57	60	29	0.76
8	Pesticides	trans-Nonachlor	E	1	1	2.9	2.9	2.9	na
8	Pesticides	trans-Nonachlor	FS	3	3	3.3	4.4	3.9	0.57
8	Pesticides	trans-Nonachlor	WB	3	3	2.6	4.1	3.2	0.78
8	Semivolatiles	1,2,4-Trichlorobenzene	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	1,2-Diphenylhydrazine	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	2,4-Dinitrotoluene	E	1	0	19	19	9.6	na
8	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	18	20	9.5	0.56
8	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	19	20	9.6	0.22
8	Semivolatiles	2,6-Dinitrotoluene	E	1	0	38	38	19	na

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	35	40	19	1.1
8	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	38	39	19	0.40
8	Semivolatiles	2-Chloronaphthalene	E	1	0	19	19	9.6	na
8	Semivolatiles	2-Chloronaphthalene	FS	3	0	18	20	9.5	0.56
8	Semivolatiles	2-Chloronaphthalene	WB	3	0	19	20	9.6	0.22
8	Semivolatiles	4-Bromophenyl-Phenylether	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	4-Chlorophenyl-Phenylether	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Acenaphthene	E	1	0	19	19	9.6	na
8	Semivolatiles	Acenaphthene	FS	3	0	18	20	9.5	0.56
8	Semivolatiles	Acenaphthene	WB	3	0	19	20	9.6	0.22
8	Semivolatiles	Acenaphthylene	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	Acenaphthylene	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	Acenaphthylene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Anthracene	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	Anthracene	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	Anthracene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Benzene, 1,2-dichloro-	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Benzene, 1,3-dichloro-	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Benzene, 1,4-dichloro-	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Benzo(a)anthracene	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	Benzo(a)anthracene	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	Benzo(a)anthracene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Benzo(a)pyrene	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	Benzo(a)pyrene	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	Benzo(a)pyrene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Benzo(g,h,i)perylene	E	1	0	19	19	9.6	na
8	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	18	20	9.5	0.56
8	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	19	20	9.6	0.22
8	Semivolatiles	Benzo[b]Fluoranthene	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Benzo[k]fluoranthene	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	bis(2-Chloroisopropyl)ether	E	1	0	19	19	9.6	na
8	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	18	20	9.5	0.56
8	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	19	20	9.6	0.22
8	Semivolatiles	Chrysene	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	Chrysene	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	Chrysene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Dibenz[a,h]anthracene	E	1	0	19	19	9.6	na
8	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	18	20	9.5	0.56
8	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	19	20	9.6	0.22
8	Semivolatiles	Dibenzofuran	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	Dibenzofuran	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	Dibenzofuran	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Fluoranthene	E	1	0	19	19	9.6	na
8	Semivolatiles	Fluoranthene	FS	3	0	18	20	9.5	0.56
8	Semivolatiles	Fluoranthene	WB	3	0	19	20	9.6	0.22
8	Semivolatiles	9H-Fluorene	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	9H-Fluorene	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	9H-Fluorene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Hexachlorobutadiene	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	Hexachlorobutadiene	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	Hexachlorobutadiene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Hexachloroethane	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	Hexachloroethane	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	Hexachloroethane	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Indeno(1,2,3-cd)pyrene	E	1	0	19	19	9.6	na
8	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	18	20	9.5	0.56
8	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	19	20	9.6	0.22
8	Semivolatiles	Naphthalene	E	1	0	44	44	22	na
8	Semivolatiles	Naphthalene	FS	3	0	19	30	12	2.7
8	Semivolatiles	Naphthalene	WB	3	0	15	40	15	6.7
8	Semivolatiles	Naphthalene, 1-methyl-	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	8.9	9.9	4.7	0.28

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	9.4	10	4.9	0.28
8	Semivolatiles	Naphthalene, 2-methyl-	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	9.4	14	5.4	1.2
8	Semivolatiles	Nitrobenzene	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	Nitrobenzene	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	Nitrobenzene	WB	3	0	9.4	13	5.3	0.93
8	Semivolatiles	Phenanthrene	E	1	0	9.6	9.6	4.8	na
8	Semivolatiles	Phenanthrene	FS	3	0	8.9	9.9	4.7	0.28
8	Semivolatiles	Phenanthrene	WB	3	0	9.4	9.8	4.8	0.10
8	Semivolatiles	Pyrene	E	1	0	19	19	9.6	na
8	Semivolatiles	Pyrene	FS	3	0	18	20	9.5	0.56
8	Semivolatiles	Pyrene	WB	3	0	19	20	9.6	0.22
8	Semivolatiles	Retene	E	1	0	19	19	9.6	na
8	Semivolatiles	Retene	FS	3	0	18	20	9.5	0.56
8	Semivolatiles	Retene	WB	3	0	19	20	9.6	0.22
14	Dioxin/furans	2,3,7,8-TCDD	FS	3	0	0.000020	0.000040	0.000013	0.0000058
14	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000020	0.000030	0.000012	0.0000029
14	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	0	0.000020	0.000050	0.000015	0.0000087
14	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.000020	0.000030	0.000013	0.0000029
14	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000020	0.000050	0.000017	0.0000076
14	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000010	0.000030	0.000010	0.0000050
14	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	0	0.000020	0.000050	0.000017	0.0000076
14	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	0	0.000010	0.000030	0.000010	0.0000050
14	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	0	0.000020	0.000050	0.000017	0.0000076
14	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	0	0.000010	0.000030	0.000010	0.0000050
14	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.000030	0.000070	0.000047	0.000021
14	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	2	0.000020	0.000060	0.000040	0.000026
14	Dioxin/furans	OCDD	FS	3	1	0.000010	0.00015	0.000057	0.000081
14	Dioxin/furans	OCDD	WB	3	0	0.000020	0.000050	0.000017	0.0000076
14	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00085	0.0014	0.0011	0.00029
14	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00084	0.0011	0.00096	0.00011
14	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	1	0.000010	0.000080	0.000032	0.000042
14	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	0	0.000020	0.000030	0.000012	0.0000029
14	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	1	0.000010	0.00016	0.000058	0.000088
14	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	2	0.000030	0.00015	0.000098	0.000073
14	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000020	0.000040	0.000013	0.0000058
14	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
14	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	0	0.000020	0.000040	0.000013	0.0000058
14	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
14	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000020	0.000040	0.000013	0.0000058
14	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
14	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000020	0.000040	0.000013	0.0000058
14	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
14	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
14	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
14	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
14	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
14	Dioxin/furans	OCDF	FS	3	0	0.000020	0.000050	0.000017	0.0000076
14	Dioxin/furans	OCDF	WB	3	0	0.000030	0.000060	0.000022	0.0000076
14	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	940	1,000	480	17
14	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	930	980	480	12
14	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	940	1,000	480	17
14	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	930	980	480	12
14	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	940	1,000	480	17
14	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	930	980	480	12
14	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	940	1,000	480	17
14	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	930	980	480	12
14	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	940	1,000	480	17
14	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	930	980	480	12
14	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	380	400	190	6.8
14	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	370	390	190	4.8
14	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	940	1,000	480	17
14	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	930	980	480	12
14	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	380	400	190	6.8
14	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	370	390	190	4.8
14	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	380	400	190	6.8
14	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	370	390	190	4.8
14	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	380	400	190	6.8
14	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	370	390	190	4.8
14	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	380	400	190	6.8
14	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	370	390	190	4.8
14	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	940	1,000	480	17
14	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	930	980	480	12
14	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	380	400	190	6.8
14	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	370	390	190	4.8

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
14	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	380	400	190	6.8
14	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	370	390	190	4.8
14	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	380	400	190	6.8
14	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	370	390	190	4.8
14	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	380	400	190	6.8
14	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	370	390	190	4.8
14	Guaiacols/Phenols	Phenol	FS	3	0	380	400	190	6.8
14	Guaiacols/Phenols	Phenol	WB	3	0	370	390	190	4.8
14	Metals	Aluminum	FS	3	1	1,000	1,100	700	350
14	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
14	Metals	Antimony	FS	3	0	50	50	25	0.00
14	Metals	Antimony	WB	3	0	50	50	25	0.00
14	Metals	Arsenic	FS	3	3	730	800	760	35
14	Metals	Arsenic	WB	3	3	840	990	930	80
14	Metals	Barium	FS	3	0	200	200	100	0.00
14	Metals	Barium	WB	3	0	200	200	100	0.00
14	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
14	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
14	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
14	Metals	Cadmium	WB	3	3	5.7	10	7.3	2.3
14	Metals	Chromium	FS	3	0	100	100	50	0.00
14	Metals	Chromium	WB	3	2	100	150	110	55
14	Metals	Cobalt	FS	3	3	3.2	3.5	3.4	0.15
14	Metals	Cobalt	WB	3	3	75	200	150	65
14	Metals	Copper	FS	3	3	540	720	620	93
14	Metals	Copper	WB	3	3	1,100	14,000	6,100	6,900
14	Metals	Lead	FS	3	0	10	10	5.0	0.00
14	Metals	Lead	WB	3	3	14	1,200	460	610
14	Metals	Manganese	FS	3	3	73	79	76	3.1
14	Metals	Manganese	WB	3	3	240	300	280	29
14	Metals	Mercury	FS	3	3	68	150	110	40
14	Metals	Mercury	WB	3	3	53	150	96	46
14	Metals	Nickel	FS	3	1	30	320	120	180
14	Metals	Nickel	WB	3	3	63	240	140	89
14	Metals	Selenium	FS	3	3	290	300	300	5.8
14	Metals	Selenium	WB	3	2	390	530	390	140
14	Metals	Silver	FS	3	0	100	100	50	0.00
14	Metals	Silver	WB	3	0	100	100	50	0.00
14	Metals	Thallium	FS	3	0	50	50	25	0.00
14	Metals	Thallium	WB	3	0	50	50	25	0.00
14	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
14	Metals	Vanadium	WB	3	3	17	27	23	5.3
14	Metals	Zinc	FS	3	3	6,100	6,800	6,500	340
14	Metals	Zinc	WB	3	3	24,000	27,000	26,000	1,600
14	PCBs	Aroclor 1016	FS	3	0	20	20	10	0.00
14	PCBs	Aroclor 1016	WB	3	0	19	20	9.8	0.29
14	PCBs	Aroclor 1221	FS	3	0	20	20	10	0.00
14	PCBs	Aroclor 1221	WB	3	0	19	20	9.8	0.29
14	PCBs	Aroclor 1232	FS	3	0	20	20	10	0.00
14	PCBs	Aroclor 1232	WB	3	0	19	20	9.8	0.29
14	PCBs	Aroclor 1242	FS	3	0	20	20	10	0.00
14	PCBs	Aroclor 1242	WB	3	0	19	20	9.8	0.29
14	PCBs	Aroclor 1248	FS	3	0	20	20	10	0.00
14	PCBs	Aroclor 1248	WB	3	0	19	20	9.8	0.29
14	PCBs	Aroclor 1254	FS	3	3	24	35	29	5.7
14	PCBs	Aroclor 1254	WB	3	3	23	30	26	3.8
14	PCBs	Aroclor 1260	FS	3	0	20	20	10	0.00
14	PCBs	Aroclor 1260	WB	3	0	19	20	9.8	0.29
14	PCBs	PCB 77	FS	3	3	0.036	0.057	0.044	0.012
14	PCBs	PCB 77	WB	3	3	0.031	0.049	0.042	0.0098
14	PCBs	PCB 105	FS	3	3	0.43	0.63	0.51	0.10
14	PCBs	PCB 105	WB	3	3	0.46	0.59	0.54	0.071
14	PCBs	PCB 114	FS	3	3	0.031	0.045	0.036	0.0074
14	PCBs	PCB 114	WB	3	3	0.041	0.042	0.042	0.00035
14	PCBs	PCB 118	FS	3	3	0.88	1.3	1.1	0.21
14	PCBs	PCB 118	WB	3	3	0.98	1.2	1.1	0.100
14	PCBs	PCB 123	FS	3	3	0.011	0.015	0.014	0.0022
14	PCBs	PCB 123	WB	3	3	0.013	0.014	0.014	0.00031
14	PCBs	PCB 126	FS	3	2	0.00050	0.0036	0.0024	0.0018
14	PCBs	PCB 126	WB	3	3	0.00050	0.0043	0.0028	0.0020
14	PCBs	PCB 156	FS	3	3	0.057	0.073	0.063	0.0087
14	PCBs	PCB 156	WB	3	3	0.076	0.083	0.079	0.0035
14	PCBs	PCB 157	FS	3	3	0.014	0.018	0.015	0.0024
14	PCBs	PCB 157	WB	3	3	0.018	0.020	0.019	0.00085
14	PCBs	PCB 167	FS	3	3	0.029	0.036	0.031	0.0039
14	PCBs	PCB 167	WB	3	3	0.031	0.036	0.033	0.0023

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
14	PCBs	PCB 169	FS	3	0	0.0010	0.0010	0.00050	0.00
14	PCBs	PCB 169	WB	3	0	0.0010	0.0010	0.00050	0.00
14	PCBs	PCB 170	FS	3	3	0.066	0.084	0.072	0.0099
14	PCBs	PCB 170	WB	3	3	0.079	0.11	0.091	0.017
14	PCBs	PCB 180	FS	3	3	0.20	0.27	0.23	0.037
14	PCBs	PCB 180	WB	3	3	0.23	0.35	0.28	0.065
14	PCBs	PCB 189	FS	3	3	0.0023	0.0031	0.0027	0.00037
14	PCBs	PCB 189	WB	3	2	0.0010	0.0043	0.0026	0.0019
14	Pesticides	Aldrin	FS	3	0	2.0	2.0	1.0	0.00
14	Pesticides	Aldrin	WB	3	0	1.9	2.0	0.98	0.029
14	Pesticides	Alpha-BHC	FS	3	0	2.0	2.0	1.0	0.00
14	Pesticides	Alpha-BHC	WB	3	0	1.9	2.0	0.98	0.029
14	Pesticides	Alpha-Chlordene	FS	3	0	2.0	2.0	1.0	0.00
14	Pesticides	Alpha-Chlordene	WB	3	0	1.9	2.0	0.98	0.029
14	Pesticides	Beta-BHC	FS	3	0	2.0	2.0	1.0	0.00
14	Pesticides	Beta-BHC	WB	3	0	1.9	2.0	0.98	0.029
14	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	2.0	2.0	1.0	0.00
14	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	2	1.4	2.0	1.3	0.31
14	Pesticides	cis-Nonachlor	FS	3	0	2.0	2.0	1.0	0.00
14	Pesticides	cis-Nonachlor	WB	3	0	1.9	2.0	0.98	0.029
14	Pesticides	DDD-o,p'	FS	3	0	2.0	2.0	1.0	0.00
14	Pesticides	DDD-o,p'	WB	3	3	0.96	1.5	1.2	0.28
14	Pesticides	DDE-o,p'	FS	3	0	2.0	2.0	1.0	0.00
14	Pesticides	DDE-o,p'	WB	3	0	1.9	2.0	0.98	0.029
14	Pesticides	DDT-o,p'	FS	3	0	2.0	2.0	1.0	0.00
14	Pesticides	DDT-o,p'	WB	3	0	1.9	2.0	0.98	0.029
14	Pesticides	DDD-p,p'	FS	3	3	3.3	5.7	4.2	1.3
14	Pesticides	DDD-p,p'	WB	3	3	3.6	6.9	5.5	1.7
14	Pesticides	DDE-p,p'	FS	3	3	8.1	12	9.5	2.1
14	Pesticides	DDE-p,p'	WB	3	3	8.2	14	10	3.3
14	Pesticides	DDT-p,p'	FS	3	2	1.8	4.2	2.3	1.7
14	Pesticides	DDT-p,p'	WB	3	0	1.9	2.0	0.98	0.029
14	Pesticides	DDMU	FS	3	0	2.0	2.0	1.0	0.00
14	Pesticides	DDMU	WB	3	0	1.9	2.0	0.98	0.029
14	Pesticides	Delta-BHC	FS	3	0	2.0	2.0	1.0	0.00
14	Pesticides	Delta-BHC	WB	3	0	1.9	2.0	0.98	0.029
14	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	0.00	na
14	Pesticides	Endosulfan Sulfate	WB	3	0	1.9	2.0	0.98	0.029
14	Pesticides	Gamma-Chlordane	FS	3	0	2.0	2.0	1.0	0.00
14	Pesticides	Gamma-Chlordane	WB	3	0	1.9	2.0	0.98	0.029
14	Pesticides	gamma-Chlordene	FS	3	0	2.0	2.0	1.0	0.00
14	Pesticides	gamma-Chlordene	WB	3	0	1.9	2.0	0.98	0.029
14	Pesticides	Heptachlor	FS	3	0	2.0	2.0	1.0	0.00
14	Pesticides	Heptachlor	WB	3	0	1.9	2.0	0.98	0.029
14	Pesticides	Heptachlor Epoxide	FS	3	0	2.0	2.0	1.0	0.00
14	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	2.0	0.98	0.029
14	Pesticides	Hexachlorobenzene	FS	3	3	1.4	2.7	2.2	0.72
14	Pesticides	Hexachlorobenzene	WB	3	3	2.0	3.0	2.5	0.50
14	Pesticides	Lindane	FS	3	0	2.0	2.0	1.0	0.00
14	Pesticides	Lindane	WB	3	0	1.9	2.0	0.98	0.029
14	Pesticides	Mirex	FS	3	0	2.0	2.0	1.0	0.00
14	Pesticides	Mirex	WB	3	0	1.9	2.0	0.98	0.029
14	Pesticides	Oxychlordane	FS	3	0	2.0	2.0	1.0	0.00
14	Pesticides	Oxychlordane	WB	3	0	1.9	2.0	0.98	0.029
14	Pesticides	Pentachloroanisol	FS	3	0	2.0	2.0	1.0	0.00
14	Pesticides	Pentachloroanisol	WB	3	0	1.9	2.0	0.98	0.029
14	Pesticides	Toxaphene	FS	3	0	59	60	30	0.29
14	Pesticides	Toxaphene	WB	3	0	58	60	30	0.58
14	Pesticides	trans-Nonachlor	FS	3	3	2.4	4.1	3.2	0.86
14	Pesticides	trans-Nonachlor	WB	3	3	2.2	4.6	3.1	1.3
14	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	150	160	77	2.9
14	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	19	20	9.5	0.25
14	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	38	40	19	0.68
14	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	37	39	19	0.50
14	Semivolatiles	2-Chloronaphthalene	FS	3	0	19	20	9.6	0.35
14	Semivolatiles	2-Chloronaphthalene	WB	3	0	19	20	9.5	0.25
14	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	Acenaphthene	FS	3	0	19	20	9.6	0.35
14	Semivolatiles	Acenaphthene	WB	3	0	19	20	9.5	0.25

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
14	Semivolatiles	Acenaphthylene	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	Acenaphthylene	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	Anthracene	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	Anthracene	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	Benzo(a)anthracene	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	Benzo(a)pyrene	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	19	20	9.6	0.35
14	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	19	20	9.5	0.25
14	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	19	20	9.6	0.35
14	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	19	20	9.5	0.25
14	Semivolatiles	Chrysene	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	Chrysene	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	19	20	9.6	0.35
14	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	19	20	9.5	0.25
14	Semivolatiles	Dibenzofuran	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	Dibenzofuran	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	Fluoranthene	FS	3	0	19	20	9.6	0.35
14	Semivolatiles	Fluoranthene	WB	3	0	19	20	9.5	0.25
14	Semivolatiles	9H-Fluorene	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	9H-Fluorene	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	Hexachlorobutadiene	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	Hexachloroethane	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	Hexachloroethane	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	19	20	9.6	0.35
14	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	19	20	9.5	0.25
14	Semivolatiles	Naphthalene	FS	3	0	15	25	9.7	2.4
14	Semivolatiles	Naphthalene	WB	3	0	12	28	10.0	4.0
14	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	Nitrobenzene	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	Nitrobenzene	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	Phenanthrene	FS	3	0	9.4	10	4.8	0.17
14	Semivolatiles	Phenanthrene	WB	3	0	9.3	9.8	4.8	0.13
14	Semivolatiles	Pyrene	FS	3	0	19	20	9.6	0.35
14	Semivolatiles	Pyrene	WB	3	0	19	20	9.5	0.25
14	Semivolatiles	Retene	FS	3	0	19	20	9.6	0.35
14	Semivolatiles	Retene	WB	3	0	19	20	9.5	0.25
30	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000010	0.000020	0.000012	0.0000076
30	Dioxin/furans	2,3,7,8-TCDD	WB	3	1	0.000010	0.000040	0.000018	0.000019
30	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000010	0.000060	0.000027	0.000029
30	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
30	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	1	0.000010	0.000020	0.000010	0.0000087
30	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	1	0.000010	0.000060	0.000025	0.000030
30	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000010	0.000030	0.000018	0.000013
30	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000010	0.000060	0.000035	0.000028
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	2	0.000010	0.00014	0.000082	0.000069
30	Dioxin/furans	OCDD	FS	3	2	0.000010	0.00036	0.00017	0.00018
30	Dioxin/furans	OCDD	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
30	Dioxin/furans	2,3,7,8-TCDF	FS	3	2	0.000030	0.00076	0.00044	0.00038
30	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00052	0.0014	0.00089	0.00042
30	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	0	0.000020	0.000020	0.000010	0.00
30	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	2	0.000010	0.00012	0.000065	0.000058
30	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	1	0.000020	0.00010	0.000040	0.000052
30	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
30	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
30	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
30	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
30	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
30	Dioxin/furans	OCDF	FS	3	0	0.000020	0.000030	0.000013	0.0000029
30	Dioxin/furans	OCDF	WB	3	0	0.000020	0.000040	0.000015	0.0000050
30	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	870	1,000	460	33
30	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	870	960	460	21
30	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	870	1,000	460	33
30	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	870	960	460	21
30	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	870	1,000	460	33
30	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	870	960	460	21
30	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	870	1,000	460	33
30	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	870	960	460	21
30	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	870	1,000	460	33
30	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	870	960	460	21
30	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	350	400	180	13
30	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	350	380	180	8.4
30	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	870	1,000	460	33
30	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	870	960	460	21
30	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	350	400	180	13
30	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	350	380	180	8.4
30	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	350	400	180	13
30	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	350	380	180	8.4
30	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	350	400	180	13
30	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	350	380	180	8.4
30	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	350	400	180	13
30	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	350	380	180	8.4
30	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	870	1,000	460	33
30	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	870	960	460	21
30	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	350	400	180	13
30	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	350	380	180	8.4
30	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	350	400	180	13
30	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	350	380	180	8.4
30	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	350	400	180	13
30	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	350	380	180	8.4
30	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	350	400	180	13
30	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	350	380	180	8.4
30	Guaiacols/Phenols	Phenol	FS	3	0	350	400	180	13
30	Guaiacols/Phenols	Phenol	WB	3	0	350	380	180	8.4
30	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
30	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
30	Metals	Antimony	FS	3	0	50	50	25	0.00
30	Metals	Antimony	WB	3	0	50	50	25	0.00
30	Metals	Arsenic	FS	3	3	530	610	560	42
30	Metals	Arsenic	WB	3	3	610	830	710	110
30	Metals	Barium	FS	3	0	200	200	100	0.00
30	Metals	Barium	WB	3	0	200	200	100	0.00
30	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
30	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
30	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
30	Metals	Cadmium	WB	3	3	4.7	5.5	5.0	0.46
30	Metals	Chromium	FS	3	0	100	100	50	0.00
30	Metals	Chromium	WB	3	2	100	180	120	66
30	Metals	Cobalt	FS	3	3	51	66	56	8.4
30	Metals	Cobalt	WB	3	3	80	220	150	69
30	Metals	Copper	FS	3	3	600	640	630	21
30	Metals	Copper	WB	3	3	1,100	1,300	1,200	70
30	Metals	Lead	FS	3	3	10	16	12	3.2
30	Metals	Lead	WB	3	3	11	14	13	1.5
30	Metals	Manganese	FS	3	3	73	110	91	17
30	Metals	Manganese	WB	3	3	280	350	320	39
30	Metals	Mercury	FS	3	3	69	100	79	18
30	Metals	Mercury	WB	3	2	50	130	74	53
30	Metals	Nickel	FS	3	2	30	220	91	110
30	Metals	Nickel	WB	3	3	64	130	98	33
30	Metals	Selenium	FS	3	3	280	280	280	0.00
30	Metals	Selenium	WB	3	3	380	550	470	86
30	Metals	Silver	FS	3	0	100	100	50	0.00
30	Metals	Silver	WB	3	0	100	100	50	0.00
30	Metals	Thallium	FS	3	0	50	50	25	0.00
30	Metals	Thallium	WB	3	0	50	50	25	0.00

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Metals	Vanadium	FS	3	1	10	11	7.0	3.5
30	Metals	Vanadium	WB	3	3	23	47	33	13
30	Metals	Zinc	FS	3	3	6,500	7,100	6,900	340
30	Metals	Zinc	WB	3	3	24,000	34,000	28,000	4,900
30	PCBs	Aroclor 1016	FS	3	0	19	20	9.7	0.29
30	PCBs	Aroclor 1016	WB	3	0	19	20	9.8	0.29
30	PCBs	Aroclor 1221	FS	3	0	19	20	9.7	0.29
30	PCBs	Aroclor 1221	WB	3	0	19	20	9.8	0.29
30	PCBs	Aroclor 1232	FS	3	0	19	20	9.7	0.29
30	PCBs	Aroclor 1232	WB	3	0	19	20	9.8	0.29
30	PCBs	Aroclor 1242	FS	3	0	19	20	9.7	0.29
30	PCBs	Aroclor 1242	WB	3	0	19	20	9.8	0.29
30	PCBs	Aroclor 1248	FS	3	0	19	20	9.7	0.29
30	PCBs	Aroclor 1248	WB	3	0	19	20	9.8	0.29
30	PCBs	Aroclor 1254	FS	3	3	8.6	16	12	3.7
30	PCBs	Aroclor 1254	WB	3	3	10	47	26	19
30	PCBs	Aroclor 1260	FS	3	0	19	20	9.7	0.29
30	PCBs	Aroclor 1260	WB	3	0	19	20	9.8	0.29
30	PCBs	PCB 77	FS	3	3	0.0041	0.0068	0.0058	0.0014
30	PCBs	PCB 77	WB	3	3	0.0077	0.016	0.011	0.0043
30	PCBs	PCB 105	FS	3	3	0.080	0.22	0.15	0.068
30	PCBs	PCB 105	WB	3	3	0.12	0.66	0.33	0.28
30	PCBs	PCB 114	FS	3	3	0.0083	0.020	0.015	0.0062
30	PCBs	PCB 114	WB	3	3	0.012	0.053	0.029	0.022
30	PCBs	PCB 118	FS	3	3	0.20	0.48	0.35	0.14
30	PCBs	PCB 118	WB	3	3	0.28	1.5	0.75	0.63
30	PCBs	PCB 123	FS	3	3	0.0033	0.0080	0.0060	0.0024
30	PCBs	PCB 123	WB	3	3	0.0054	0.012	0.0089	0.0033
30	PCBs	PCB 126	FS	3	2	0.00050	0.0017	0.00093	0.00072
30	PCBs	PCB 126	WB	3	2	0.00050	0.0047	0.0024	0.0022
30	PCBs	PCB 156	FS	3	3	0.016	0.045	0.029	0.015
30	PCBs	PCB 156	WB	3	3	0.019	0.20	0.085	0.096
30	PCBs	PCB 157	FS	3	3	0.0041	0.012	0.0084	0.0039
30	PCBs	PCB 157	WB	3	3	0.0053	0.045	0.020	0.021
30	PCBs	PCB 167	FS	3	3	0.010	0.025	0.017	0.0075
30	PCBs	PCB 167	WB	3	3	0.013	0.078	0.038	0.035
30	PCBs	PCB 169	FS	3	0	0.0010	0.0010	0.00050	0.00
30	PCBs	PCB 169	WB	3	0	0.0010	0.0012	0.00054	0.00061
30	PCBs	PCB 170	FS	3	3	0.038	0.11	0.074	0.036
30	PCBs	PCB 170	WB	3	3	0.047	0.35	0.16	0.17
30	PCBs	PCB 180	FS	3	3	0.12	0.35	0.23	0.11
30	PCBs	PCB 180	WB	3	3	0.14	1.2	0.53	0.55
30	PCBs	PCB 189	FS	3	2	0.0010	0.0041	0.0024	0.0018
30	PCBs	PCB 189	WB	3	3	0.0017	0.014	0.0064	0.0068
30	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.97	0.029
30	Pesticides	Aldrin	WB	3	0	1.9	2.0	0.98	0.029
30	Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.97	0.029
30	Pesticides	Alpha-BHC	WB	3	0	1.9	2.0	0.98	0.029
30	Pesticides	Alpha-Chlordane	FS	3	0	1.9	2.0	0.97	0.029
30	Pesticides	Alpha-Chlordane	WB	3	0	1.9	2.0	0.98	0.029
30	Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.97	0.029
30	Pesticides	Beta-BHC	WB	3	0	1.9	2.0	0.98	0.029
30	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.9	2.0	0.97	0.029
30	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	1	1.9	2.3	1.4	0.77
30	Pesticides	cis-Nonachlor	FS	3	0	1.9	2.0	0.97	0.029
30	Pesticides	cis-Nonachlor	WB	3	1	1.3	2.0	1.1	0.19
30	Pesticides	DDD-o,p'	FS	3	0	1.9	2.0	0.97	0.029
30	Pesticides	DDD-o,p'	WB	3	1	1.2	2.0	1.1	0.13
30	Pesticides	DDE-o,p'	FS	3	0	1.9	2.0	0.97	0.029
30	Pesticides	DDE-o,p'	WB	3	0	1.9	2.0	0.98	0.029
30	Pesticides	DDT-o,p'	FS	3	0	1.9	2.0	0.97	0.029
30	Pesticides	DDT-o,p'	WB	3	0	1.9	2.0	0.98	0.029
30	Pesticides	DDD-p,p'	FS	3	3	2.4	3.3	2.7	0.49
30	Pesticides	DDD-p,p'	WB	3	3	1.4	2.9	2.2	0.75
30	Pesticides	DDE-p,p'	FS	3	3	4.2	12	8.2	3.9
30	Pesticides	DDE-p,p'	WB	3	3	8.4	53	26	24
30	Pesticides	DDT-p,p'	FS	3	2	1.9	3.1	2.2	1.1
30	Pesticides	DDT-p,p'	WB	3	2	2.0	3.5	2.6	1.4
30	Pesticides	DDMU	FS	3	0	1.9	2.0	0.97	0.029
30	Pesticides	DDMU	WB	3	1	1.9	2.4	1.5	0.82
30	Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.97	0.029
30	Pesticides	Delta-BHC	WB	3	0	1.9	2.0	0.98	0.029
30	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	0.00	na
30	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	0.00	na
30	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.0	0.97	0.029
30	Pesticides	Gamma-Chlordane	WB	3	0	1.9	2.0	0.98	0.029

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Pesticides	gamma-Chlordene	FS	3	0	1.9	2.0	0.97	0.029
30	Pesticides	gamma-Chlordene	WB	3	0	1.9	2.0	0.98	0.029
30	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.97	0.029
30	Pesticides	Heptachlor	WB	3	0	1.9	2.0	0.98	0.029
30	Pesticides	Heptachlor Epoxide	FS	3	0	1.9	2.0	0.97	0.029
30	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	2.0	0.98	0.029
30	Pesticides	Hexachlorobenzene	FS	3	3	1.1	1.8	1.5	0.35
30	Pesticides	Hexachlorobenzene	WB	3	3	3.1	3.5	3.3	0.21
30	Pesticides	Lindane	FS	3	0	1.9	2.0	0.97	0.029
30	Pesticides	Lindane	WB	3	0	1.9	2.0	0.98	0.029
30	Pesticides	Mirex	FS	3	0	1.9	2.0	0.97	0.029
30	Pesticides	Mirex	WB	3	0	1.9	2.0	0.98	0.029
30	Pesticides	Oxychlordane	FS	3	0	1.9	2.0	0.97	0.029
30	Pesticides	Oxychlordane	WB	3	0	1.9	2.0	0.98	0.029
30	Pesticides	Pentachloroanisol	FS	3	0	1.9	2.0	0.97	0.029
30	Pesticides	Pentachloroanisol	WB	3	0	1.9	2.0	0.98	0.029
30	Pesticides	Toxaphene	FS	3	0	57	59	29	0.58
30	Pesticides	Toxaphene	WB	3	0	58	59	29	0.29
30	Pesticides	trans-Nonachlor	FS	3	2	1.9	3.1	2.1	1.1
30	Pesticides	trans-Nonachlor	WB	3	3	2.0	6.5	4.3	2.3
30	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	140	160	74	5.2
30	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	140	150	73	3.5
30	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	35	40	18	1.3
30	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	35	38	18	0.84
30	Semivolatiles	2-Chloronaphthalene	FS	3	0	17	20	9.2	0.65
30	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	19	9.1	0.43
30	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	Acenaphthene	FS	3	0	17	20	9.2	0.65
30	Semivolatiles	Acenaphthene	WB	3	0	18	19	9.1	0.43
30	Semivolatiles	Acenaphthylene	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	Acenaphthylene	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	Anthracene	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	Anthracene	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	Benzo(a)anthracene	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	Benzo(a)pyrene	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	17	20	9.2	0.65
30	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	19	9.1	0.43
30	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	17	20	9.2	0.65
30	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	19	9.1	0.43
30	Semivolatiles	Chrysene	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	Chrysene	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	17	20	9.2	0.65
30	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	19	9.1	0.43
30	Semivolatiles	Dibenzofuran	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	Dibenzofuran	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	Fluoranthene	FS	3	0	17	20	9.2	0.65
30	Semivolatiles	Fluoranthene	WB	3	0	18	19	9.1	0.43
30	Semivolatiles	9H-Fluorene	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	9H-Fluorene	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	Hexachlorobutadiene	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	Hexachloroethane	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	Hexachloroethane	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	17	20	9.2	0.65
30	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	19	9.1	0.43
30	Semivolatiles	Naphthalene	FS	3	0	13	22	8.1	2.4
30	Semivolatiles	Naphthalene	WB	3	0	19	24	11	1.2

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	Nitrobenzene	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	Nitrobenzene	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	Phenanthrene	FS	3	0	8.7	10	4.6	0.34
30	Semivolatiles	Phenanthrene	WB	3	0	8.7	9.6	4.6	0.23
30	Semivolatiles	Pyrene	FS	3	0	17	20	9.2	0.65
30	Semivolatiles	Pyrene	WB	3	0	18	19	9.1	0.43
30	Semivolatiles	Retene	FS	3	0	17	20	9.2	0.65
30	Semivolatiles	Retene	WB	3	0	18	19	9.1	0.43
48	Dioxin/furans	2,3,7,8-TCDD	FS	3	0	0.000030	0.000050	0.000020	0.0000050
48	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000030	0.000060	0.000020	0.0000087
48	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000060	0.00011	0.000057	0.000046
48	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	2	0.000050	0.000090	0.000065	0.000035
48	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000030	0.000060	0.000024	0.0000080
48	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000020	0.000040	0.000013	0.0000058
48	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	0	0.000030	0.000060	0.000024	0.0000080
48	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000020	0.000070	0.000047	0.000032
48	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	0	0.000030	0.000060	0.000024	0.0000080
48	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	0	0.000020	0.000040	0.000013	0.0000058
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000020	0.00013	0.000073	0.000060
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	2	0.000030	0.00012	0.000082	0.000058
48	Dioxin/furans	OCDD	FS	3	2	0.000060	0.00042	0.00021	0.00020
48	Dioxin/furans	OCDD	WB	3	2	0.000040	0.00064	0.00030	0.00031
48	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00049	0.00067	0.00060	0.000099
48	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00072	0.0011	0.00088	0.00019
48	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	0	0.000030	0.000040	0.000018	0.0000029
48	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	0	0.000030	0.000040	0.000017	0.0000029
48	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	0	0.000030	0.000040	0.000018	0.0000029
48	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	0	0.000030	0.000040	0.000017	0.0000029
48	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000040	0.000060	0.000023	0.0000058
48	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	0	0.000020	0.000030	0.000012	0.0000029
48	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	0	0.000040	0.000060	0.000023	0.0000058
48	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	0	0.000020	0.000030	0.000012	0.0000029
48	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000040	0.000060	0.000023	0.0000058
48	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000020	0.000030	0.000012	0.0000029
48	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000040	0.000060	0.000023	0.0000058
48	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	0	0.000020	0.000030	0.000012	0.0000029
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000020	0.000050	0.000017	0.0000076
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	1	0.000020	0.00012	0.000048	0.000062
48	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000020	0.000050	0.000017	0.0000076
48	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000020	0.000030	0.000012	0.0000029
48	Dioxin/furans	OCDF	FS	3	0	0.000070	0.00017	0.000056	0.000024
48	Dioxin/furans	OCDF	WB	3	0	0.000060	0.00010	0.000037	0.000012
48	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	930	950	470	4.6
48	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	880	990	460	29
48	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	930	950	470	4.6
48	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	880	990	460	29
48	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	930	950	470	4.6
48	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	880	990	460	29
48	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	930	950	470	4.6
48	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	880	990	460	29
48	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	930	950	470	4.6
48	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	880	990	460	29
48	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	370	380	190	1.8
48	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	350	390	180	12
48	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	930	950	470	4.6
48	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	880	990	460	29
48	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	370	380	190	1.8
48	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	350	390	180	12
48	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	370	380	190	1.8
48	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	350	390	180	12
48	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	370	380	190	1.8
48	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	350	390	180	12
48	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	370	380	190	1.8
48	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	350	390	180	12
48	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	930	950	470	4.6
48	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	880	990	460	29
48	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	370	380	190	1.8
48	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	350	390	180	12
48	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	370	380	190	1.8
48	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	350	390	180	12
48	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	370	380	190	1.8
48	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	350	390	180	12

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	370	380	190	1.8
48	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	350	390	180	12
48	Guaiacols/Phenols	Phenol	FS	3	0	370	450	200	22
48	Guaiacols/Phenols	Phenol	WB	3	0	350	390	180	12
48	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
48	Metals	Aluminum	WB	3	1	630	1,000	540	75
48	Metals	Antimony	FS	3	0	50	50	25	0.00
48	Metals	Antimony	WB	3	0	50	50	25	0.00
48	Metals	Arsenic	FS	3	3	750	850	810	56
48	Metals	Arsenic	WB	3	3	770	860	820	47
48	Metals	Barium	FS	3	2	200	340	260	140
48	Metals	Barium	WB	3	1	200	250	150	87
48	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
48	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
48	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
48	Metals	Cadmium	WB	3	3	5.4	7.2	6.0	1.0
48	Metals	Chromium	FS	3	2	100	300	160	130
48	Metals	Chromium	WB	3	2	100	140	100	46
48	Metals	Cobalt	FS	3	3	47	400	170	200
48	Metals	Cobalt	WB	3	3	89	170	130	41
48	Metals	Copper	FS	3	3	690	760	730	34
48	Metals	Copper	WB	3	3	1,000	3,500	1,900	1,300
48	Metals	Lead	FS	3	1	10	11	7.0	3.5
48	Metals	Lead	WB	3	3	19	200	84	100
48	Metals	Manganese	FS	3	3	92	110	100	8.5
48	Metals	Manganese	WB	3	3	250	340	310	50
48	Metals	Mercury	FS	3	3	72	98	85	13
48	Metals	Mercury	WB	3	2	50	190	92	86
48	Metals	Nickel	FS	3	3	76	140	120	35
48	Metals	Nickel	WB	3	3	140	140	140	4.0
48	Metals	Selenium	FS	3	3	330	380	360	29
48	Metals	Selenium	WB	3	3	430	570	480	76
48	Metals	Silver	FS	3	0	100	100	50	0.00
48	Metals	Silver	WB	3	0	100	100	50	0.00
48	Metals	Thallium	FS	3	0	50	50	25	0.00
48	Metals	Thallium	WB	3	0	50	50	25	0.00
48	Metals	Vanadium	FS	3	1	10	11	6.2	2.0
48	Metals	Vanadium	WB	3	3	20	28	25	4.2
48	Metals	Zinc	FS	3	3	7,900	8,000	8,000	53
48	Metals	Zinc	WB	3	3	21,000	25,000	23,000	1,900
48	PCBs	Aroclor 1016	FS	3	0	20	20	9.9	0.14
48	PCBs	Aroclor 1016	WB	3	0	19	19	9.5	0.00
48	PCBs	Aroclor 1221	FS	3	0	20	20	9.9	0.14
48	PCBs	Aroclor 1221	WB	3	0	19	19	9.5	0.00
48	PCBs	Aroclor 1232	FS	3	0	20	20	9.9	0.14
48	PCBs	Aroclor 1232	WB	3	0	19	19	9.5	0.00
48	PCBs	Aroclor 1242	FS	3	0	20	20	9.9	0.14
48	PCBs	Aroclor 1242	WB	3	0	19	19	9.5	0.00
48	PCBs	Aroclor 1248	FS	3	0	20	20	9.9	0.14
48	PCBs	Aroclor 1248	WB	3	0	19	19	9.5	0.00
48	PCBs	Aroclor 1254	FS	3	3	14	17	15	1.4
48	PCBs	Aroclor 1254	WB	3	3	15	25	19	5.5
48	PCBs	Aroclor 1260	FS	3	0	20	20	9.9	0.14
48	PCBs	Aroclor 1260	WB	3	0	19	19	9.5	0.00
48	PCBs	PCB 77	FS	3	3	0.0073	0.0086	0.0078	0.00072
48	PCBs	PCB 77	WB	3	3	0.0091	0.0097	0.0094	0.00030
48	PCBs	PCB 105	FS	3	3	0.17	0.24	0.20	0.034
48	PCBs	PCB 105	WB	3	3	0.20	0.34	0.25	0.078
48	PCBs	PCB 114	FS	3	3	0.017	0.021	0.019	0.0023
48	PCBs	PCB 114	WB	3	3	0.018	0.031	0.022	0.0072
48	PCBs	PCB 118	FS	3	3	0.41	0.51	0.46	0.054
48	PCBs	PCB 118	WB	3	3	0.46	0.74	0.56	0.16
48	PCBs	PCB 123	FS	3	3	0.0058	0.0076	0.0066	0.00094
48	PCBs	PCB 123	WB	3	3	0.0078	0.011	0.0090	0.0015
48	PCBs	PCB 126	FS	3	3	0.0017	0.0020	0.0018	0.00014
48	PCBs	PCB 126	WB	3	2	0.00066	0.0025	0.0017	0.0012
48	PCBs	PCB 156	FS	3	3	0.039	0.056	0.046	0.0087
48	PCBs	PCB 156	WB	3	3	0.039	0.083	0.054	0.025
48	PCBs	PCB 157	FS	3	3	0.0099	0.014	0.011	0.0022
48	PCBs	PCB 157	WB	3	3	0.011	0.024	0.015	0.0072
48	PCBs	PCB 167	FS	3	3	0.023	0.027	0.025	0.0018
48	PCBs	PCB 167	WB	3	3	0.023	0.038	0.028	0.0081
48	PCBs	PCB 169	FS	3	0	0.0010	0.0010	0.00050	0.00
48	PCBs	PCB 169	WB	3	0	0.0010	0.0010	0.00050	0.00
48	PCBs	PCB 170	FS	3	3	0.091	0.13	0.11	0.018
48	PCBs	PCB 170	WB	3	3	0.080	0.18	0.12	0.056

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	PCBs	PCB 180	FS	3	3	0.30	0.42	0.35	0.064
48	PCBs	PCB 180	WB	3	3	0.26	0.57	0.37	0.17
48	PCBs	PCB 189	FS	3	3	0.0035	0.0052	0.0041	0.00090
48	PCBs	PCB 189	WB	3	2	0.0010	0.0068	0.0036	0.0031
48	Pesticides	Aldrin	FS	3	0	2.0	2.0	0.99	0.014
48	Pesticides	Aldrin	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Alpha-BHC	FS	3	0	2.0	2.0	0.99	0.014
48	Pesticides	Alpha-BHC	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Alpha-Chlordane	FS	3	0	2.0	2.0	0.99	0.014
48	Pesticides	Alpha-Chlordane	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Beta-BHC	FS	3	0	2.0	2.0	0.99	0.014
48	Pesticides	Beta-BHC	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	2.0	2.0	0.99	0.014
48	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	cis-Nonachlor	FS	3	0	2.0	2.0	0.99	0.014
48	Pesticides	cis-Nonachlor	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	DDD-o,p'	FS	3	0	2.0	2.0	0.99	0.014
48	Pesticides	DDD-o,p'	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	DDE-o,p'	FS	3	0	2.0	2.0	0.99	0.014
48	Pesticides	DDE-o,p'	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	DDT-o,p'	FS	3	0	2.0	2.0	0.99	0.014
48	Pesticides	DDT-o,p'	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	DDD-p,p'	FS	3	2	2.0	6.1	4.2	2.8
48	Pesticides	DDD-p,p'	WB	3	3	5.7	8.2	6.8	1.3
48	Pesticides	DDE-p,p'	FS	3	3	23	26	24	1.4
48	Pesticides	DDE-p,p'	WB	3	3	25	28	26	1.5
48	Pesticides	DDT-p,p'	FS	3	3	3.2	6.5	5.2	1.7
48	Pesticides	DDT-p,p'	WB	3	3	6.1	7.7	7.0	0.81
48	Pesticides	DDMU	FS	3	0	2.0	2.0	0.99	0.014
48	Pesticides	DDMU	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Delta-BHC	FS	3	0	2.0	2.0	0.99	0.014
48	Pesticides	Delta-BHC	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	0.00	na
48	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	0.00	na
48	Pesticides	Gamma-Chlordane	FS	3	0	2.0	2.0	0.99	0.014
48	Pesticides	Gamma-Chlordane	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	gamma-Chlordane	FS	3	0	2.0	2.0	0.99	0.014
48	Pesticides	gamma-Chlordane	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Heptachlor	FS	3	0	2.0	2.0	0.99	0.014
48	Pesticides	Heptachlor	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Heptachlor Epoxide	FS	3	0	2.0	2.0	0.99	0.014
48	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Hexachlorobenzene	FS	3	3	1.7	2.0	1.8	0.18
48	Pesticides	Hexachlorobenzene	WB	3	3	2.6	2.9	2.8	0.15
48	Pesticides	Lindane	FS	3	0	2.0	2.0	0.99	0.014
48	Pesticides	Lindane	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Mirex	FS	3	0	2.0	2.0	0.99	0.014
48	Pesticides	Mirex	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Oxychlordane	FS	3	0	2.0	2.0	0.99	0.014
48	Pesticides	Oxychlordane	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Pentachloroanisol	FS	3	0	2.0	2.0	0.99	0.014
48	Pesticides	Pentachloroanisol	WB	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Toxaphene	FS	3	0	59	60	30	0.38
48	Pesticides	Toxaphene	WB	3	0	56	58	29	0.50
48	Pesticides	trans-Nonachlor	FS	3	3	2.2	2.7	2.4	0.25
48	Pesticides	trans-Nonachlor	WB	3	3	3.0	4.4	3.7	0.70
48	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	150	150	76	0.58
48	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	140	160	74	4.7
48	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	37	38	19	0.18
48	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	35	39	18	1.2
48	Semivolatiles	2-Chloronaphthalene	FS	3	0	19	19	9.5	0.087
48	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	20	9.2	0.58
48	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	Acenaphthene	FS	3	0	19	19	9.5	0.087
48	Semivolatiles	Acenaphthene	WB	3	0	18	20	9.2	0.58
48	Semivolatiles	Acenaphthylene	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	Acenaphthylene	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	Anthracene	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	Anthracene	WB	3	0	8.8	9.9	4.6	0.29

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	19	19	9.5	0.087
48	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	20	9.2	0.58
48	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	19	19	9.5	0.087
48	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	20	9.2	0.58
48	Semivolatiles	Chrysene	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	Chrysene	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	19	19	9.5	0.087
48	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	20	9.2	0.58
48	Semivolatiles	Dibenzofuran	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	Dibenzofuran	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	Fluoranthene	FS	3	0	19	19	9.5	0.087
48	Semivolatiles	Fluoranthene	WB	3	0	18	20	9.2	0.58
48	Semivolatiles	9H-Fluorene	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	9H-Fluorene	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	Hexachloroethane	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	Hexachloroethane	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	19	19	9.5	0.087
48	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	20	9.2	0.58
48	Semivolatiles	Naphthalene	FS	3	0	18	19	9.2	0.18
48	Semivolatiles	Naphthalene	WB	3	0	20	20	10	0.13
48	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	Nitrobenzene	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	Nitrobenzene	WB	3	0	8.8	9.9	4.6	0.29
48	Semivolatiles	Phenanthrene	FS	3	0	9.3	9.5	4.7	0.058
48	Semivolatiles	Phenanthrene	WB	3	0	9.0	11	4.9	0.43
48	Semivolatiles	Pyrene	FS	3	0	19	19	9.5	0.087
48	Semivolatiles	Pyrene	WB	3	0	18	20	9.2	0.58
48	Semivolatiles	Retene	FS	3	0	19	19	9.5	0.087
48	Semivolatiles	Retene	WB	3	0	18	20	9.2	0.58
56	Dioxin/furans	2,3,7,8-TCDD	FS	3	0	0.000020	0.000040	0.000015	0.0000050
56	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000020	0.000030	0.000012	0.0000029
56	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	0	0.000030	0.000050	0.000020	0.0000050
56	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.000030	0.000040	0.000018	0.0000029
56	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000010	0.000020	0.0000083	0.0000029
56	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
56	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	0	0.000010	0.000020	0.0000083	0.0000029
56	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	1	0.000010	0.000020	0.000012	0.0000076
56	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	0	0.000010	0.000020	0.0000083	0.0000029
56	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
56	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	1	0.000020	0.000050	0.000023	0.0000023
56	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	0	0.000030	0.000060	0.000020	0.0000087
56	Dioxin/furans	OCDD	FS	3	1	0.000020	0.00011	0.000045	0.0000056
56	Dioxin/furans	OCDD	WB	3	0	0.000030	0.000060	0.000020	0.0000087
56	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00044	0.00080	0.00057	0.00020
56	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00046	0.00054	0.00051	0.000042
56	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	0	0.000020	0.000030	0.000012	0.0000029
56	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	1	0.000010	0.000040	0.000020	0.0000018
56	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	1	0.000020	0.000050	0.000025	0.0000022
56	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	2	0.000030	0.000080	0.000052	0.0000033
56	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
56	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
56	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
56	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
56	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
56	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
56	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
56	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
56	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000010	0.000030	0.0000083	0.0000058
56	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
56	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000030	0.0000083	0.0000058
56	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
56	Dioxin/furans	OCDF	FS	3	1	0.000030	0.00013	0.000055	0.000065
56	Dioxin/furans	OCDF	WB	3	0	0.000050	0.000090	0.000035	0.000010
56	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	930	990	480	16
56	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	930	990	480	15
56	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	930	990	480	16
56	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	930	990	480	15
56	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	930	990	480	16
56	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	930	990	480	15
56	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	930	990	480	16
56	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	930	990	480	15
56	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	930	990	480	16
56	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	930	990	480	15
56	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	370	400	190	6.3
56	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	370	400	190	6.3
56	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	930	990	480	16
56	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	930	990	480	15
56	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	370	400	190	6.3
56	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	370	400	190	6.3
56	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	370	400	190	6.3
56	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	370	400	190	6.3
56	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	370	400	190	6.3
56	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	370	400	190	6.3
56	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	370	400	190	6.3
56	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	370	400	190	6.3
56	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	930	990	480	16
56	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	930	990	480	15
56	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	370	400	190	6.3
56	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	370	400	190	6.3
56	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	370	400	190	6.3
56	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	370	400	190	6.3
56	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	370	400	190	6.3
56	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	370	400	190	6.3
56	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	370	400	190	6.3
56	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	370	400	190	6.3
56	Guaiacols/Phenols	Phenol	FS	3	0	370	400	190	6.3
56	Guaiacols/Phenols	Phenol	WB	3	0	370	400	190	6.3
56	Metals	Aluminum	FS	3	1	1,000	1,200	730	400
56	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
56	Metals	Antimony	FS	3	0	50	50	25	0.00
56	Metals	Antimony	WB	3	0	50	50	25	0.00
56	Metals	Arsenic	FS	3	3	780	1,100	920	160
56	Metals	Arsenic	WB	3	3	910	1,000	960	72
56	Metals	Barium	FS	3	0	200	200	100	0.00
56	Metals	Barium	WB	3	0	200	200	100	0.00
56	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
56	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
56	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
56	Metals	Cadmium	WB	3	3	5.0	7.4	6.1	1.2
56	Metals	Chromium	FS	3	0	100	100	50	0.00
56	Metals	Chromium	WB	3	3	110	170	140	31
56	Metals	Cobalt	FS	3	3	2.9	3.8	3.4	0.46
56	Metals	Cobalt	WB	3	3	76	160	120	44
56	Metals	Copper	FS	3	3	600	710	650	54
56	Metals	Copper	WB	3	3	1,600	2,900	2,300	640
56	Metals	Lead	FS	3	0	10	10	5.0	0.00
56	Metals	Lead	WB	3	3	54	170	120	57
56	Metals	Manganese	FS	3	3	72	93	82	11
56	Metals	Manganese	WB	3	3	250	390	340	78
56	Metals	Mercury	FS	3	2	50	81	58	29
56	Metals	Mercury	WB	3	1	50	66	39	24
56	Metals	Nickel	FS	3	1	30	51	27	21
56	Metals	Nickel	WB	3	3	80	240	140	85
56	Metals	Selenium	FS	3	3	380	380	380	0.00
56	Metals	Selenium	WB	3	3	490	510	500	11
56	Metals	Silver	FS	3	0	100	100	50	0.00
56	Metals	Silver	WB	3	0	100	100	50	0.00
56	Metals	Thallium	FS	3	0	50	50	25	0.00
56	Metals	Thallium	WB	3	0	50	50	25	0.00
56	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
56	Metals	Vanadium	WB	3	3	20	22	21	1.2
56	Metals	Zinc	FS	3	3	5,600	6,400	6,100	440
56	Metals	Zinc	WB	3	3	24,000	32,000	27,000	4,200

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
56	PCBs	Aroclor 1016	FS	3	0	19	20	9.8	0.29
56	PCBs	Aroclor 1016	WB	3	0	20	20	10	0.00
56	PCBs	Aroclor 1221	FS	3	0	19	20	9.8	0.29
56	PCBs	Aroclor 1221	WB	3	0	20	20	10	0.00
56	PCBs	Aroclor 1232	FS	3	0	19	20	9.8	0.29
56	PCBs	Aroclor 1232	WB	3	0	20	20	10	0.00
56	PCBs	Aroclor 1242	FS	3	0	19	20	9.8	0.29
56	PCBs	Aroclor 1242	WB	3	0	20	20	10	0.00
56	PCBs	Aroclor 1248	FS	3	0	19	20	9.8	0.29
56	PCBs	Aroclor 1248	WB	3	0	20	20	10	0.00
56	PCBs	Aroclor 1254	FS	3	3	11	18	14	3.6
56	PCBs	Aroclor 1254	WB	3	3	12	16	15	2.3
56	PCBs	Aroclor 1260	FS	3	0	19	20	9.8	0.29
56	PCBs	Aroclor 1260	WB	3	0	20	20	10	0.00
56	PCBs	PCB 77	FS	3	3	0.0041	0.0054	0.0049	0.00074
56	PCBs	PCB 77	WB	3	3	0.0051	0.0068	0.0058	0.00090
56	PCBs	PCB 105	FS	3	3	0.12	0.19	0.14	0.044
56	PCBs	PCB 105	WB	3	3	0.11	0.16	0.14	0.023
56	PCBs	PCB 114	FS	3	3	0.011	0.017	0.013	0.0037
56	PCBs	PCB 114	WB	3	3	0.011	0.015	0.014	0.0021
56	PCBs	PCB 118	FS	3	3	0.27	0.46	0.34	0.11
56	PCBs	PCB 118	WB	3	3	0.27	0.36	0.33	0.050
56	PCBs	PCB 123	FS	3	3	0.0052	0.0068	0.0060	0.00080
56	PCBs	PCB 123	WB	3	3	0.0050	0.0073	0.0062	0.0012
56	PCBs	PCB 126	FS	3	0	0.00050	0.00063	0.00027	0.000038
56	PCBs	PCB 126	WB	3	1	0.00050	0.00059	0.00035	0.00013
56	PCBs	PCB 156	FS	3	3	0.018	0.031	0.023	0.0071
56	PCBs	PCB 156	WB	3	3	0.025	0.033	0.030	0.0041
56	PCBs	PCB 157	FS	3	3	0.0041	0.0070	0.0055	0.0015
56	PCBs	PCB 157	WB	3	3	0.0071	0.0085	0.0080	0.00079
56	PCBs	PCB 167	FS	3	3	0.013	0.020	0.016	0.0041
56	PCBs	PCB 167	WB	3	3	0.013	0.018	0.016	0.0025
56	PCBs	PCB 169	FS	3	0	0.0010	0.0010	0.00050	0.00
56	PCBs	PCB 169	WB	3	0	0.0010	0.0010	0.00050	0.00
56	PCBs	PCB 170	FS	3	3	0.043	0.068	0.053	0.013
56	PCBs	PCB 170	WB	3	3	0.044	0.061	0.055	0.0098
56	PCBs	PCB 180	FS	3	3	0.14	0.22	0.18	0.041
56	PCBs	PCB 180	WB	3	3	0.15	0.20	0.18	0.026
56	PCBs	PCB 189	FS	3	2	0.0010	0.0026	0.0015	0.0010
56	PCBs	PCB 189	WB	3	2	0.0018	0.0025	0.0019	0.00088
56	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Aldrin	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Alpha-BHC	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Alpha-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Alpha-Chlordane	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Beta-BHC	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	2	1.2	2.0	1.3	0.36
56	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	2	1.4	2.0	1.3	0.26
56	Pesticides	cis-Nonachlor	FS	3	1	1.2	2.0	1.1	0.12
56	Pesticides	cis-Nonachlor	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	DDD-o,p'	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	DDD-o,p'	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	DDE-o,p'	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	DDE-o,p'	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	DDT-o,p'	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	DDT-o,p'	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	DDD-p,p'	FS	3	3	1.8	2.6	2.2	0.40
56	Pesticides	DDD-p,p'	WB	3	3	2.1	2.8	2.5	0.36
56	Pesticides	DDE-p,p'	FS	3	3	4.2	9.1	6.6	2.5
56	Pesticides	DDE-p,p'	WB	3	3	4.5	7.3	6.2	1.5
56	Pesticides	DDT-p,p'	FS	3	1	2.0	2.7	1.6	0.98
56	Pesticides	DDT-p,p'	WB	3	2	2.0	2.2	1.7	0.64
56	Pesticides	DDMU	FS	3	2	1.2	2.0	1.2	0.20
56	Pesticides	DDMU	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Delta-BHC	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	0.00	na
56	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	0.00	na
56	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Gamma-Chlordane	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	gamma-Chlordene	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	gamma-Chlordene	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Heptachlor	WB	3	0	2.0	2.0	1.0	0.00

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
56	Pesticides	Heptachlor Epoxide	FS	3	0	0.00	0.00	0.00	na
56	Pesticides	Heptachlor Epoxide	WB	3	0	0.00	0.00	0.00	na
56	Pesticides	Hexachlorobenzene	FS	3	3	2.1	3.4	2.6	0.68
56	Pesticides	Hexachlorobenzene	WB	3	3	2.8	3.3	3.0	0.26
56	Pesticides	Lindane	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Lindane	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Mirex	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Mirex	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Oxychlorodane	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Oxychlorodane	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Pentachloroanisol	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Pentachloroanisol	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Toxaphene	FS	3	0	58	60	30	0.58
56	Pesticides	Toxaphene	WB	3	0	59	60	30	0.29
56	Pesticides	trans-Nonachlor	FS	3	3	2.2	4.1	3.0	0.97
56	Pesticides	trans-Nonachlor	WB	3	3	2.2	3.4	2.9	0.61
56	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	19	20	9.7	0.32
56	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	37	40	19	0.63
56	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	37	40	19	0.63
56	Semivolatiles	2-Chloronaphthalene	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	2-Chloronaphthalene	WB	3	0	19	20	9.7	0.32
56	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	Acenaphthene	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	Acenaphthene	WB	3	0	19	20	9.7	0.32
56	Semivolatiles	Acenaphthylene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Acenaphthylene	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	Anthracene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Anthracene	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Benzo(a)anthracene	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Benzo(a)pyrene	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	19	20	9.7	0.32
56	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	19	20	9.7	0.32
56	Semivolatiles	Chrysene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Chrysene	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	19	20	9.7	0.32
56	Semivolatiles	Dibenzofuran	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Dibenzofuran	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	Fluoranthene	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	Fluoranthene	WB	3	0	19	20	9.7	0.32
56	Semivolatiles	9H-Fluorene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	9H-Fluorene	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Hexachlorobutadiene	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	Hexachloroethane	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Hexachloroethane	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	19	20	9.7	0.32
56	Semivolatiles	Naphthalene	FS	3	0	26	40	16	3.6
56	Semivolatiles	Naphthalene	WB	3	0	28	39	16	2.7
56	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.7	10	4.9	0.076
56	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.9	21	7.2	2.8
56	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	9.3	9.9	4.8	0.16

Appendix D-1: Site Summary Statistics
Fall Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
56	Semivolatiles	Nitrobenzene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Nitrobenzene	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	Phenanthrene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Phenanthrene	WB	3	0	9.3	9.9	4.8	0.16
56	Semivolatiles	Pyrene	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	Pyrene	WB	3	0	19	20	9.7	0.32
56	Semivolatiles	Retene	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	Retene	WB	3	0	19	20	9.7	0.32

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
21	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000010	0.000040	0.000018	0.000019
21	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000010	0.000030	0.000010	0.0000050
21	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000010	0.000060	0.000025	0.000030
21	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.000010	0.000010	0.0000050	0.00
21	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	2	0.000020	0.000020	0.000017	0.0000058
21	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000010	0.000040	0.000010	0.0000087
21	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.000060	0.000080	0.000073	0.000012
21	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	3	0.000090	0.000090	0.000090	1.3E-12
21	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000010	0.000040	0.000028	0.000020
21	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	3	0.000040	0.000070	0.000057	0.000015
21	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.000090	0.00016	0.00012	0.000036
21	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	1	0.000030	0.00019	0.000077	0.000098
21	Dioxin/furans	OCDD	FS	3	1	0.000040	0.00023	0.000095	0.00012
21	Dioxin/furans	OCDD	WB	3	2	0.000010	0.00042	0.00026	0.00022
21	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.000051	0.00072	0.00058	0.00012
21	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00069	0.00088	0.00077	0.000098
21	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.000050	0.000080	0.000067	0.000015
21	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	2	0.000040	0.000060	0.000043	0.000021
21	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.000080	0.000090	0.000087	0.0000058
21	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	2	0.000040	0.00013	0.000087	0.000059
21	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000010	0.000040	0.000013	0.0000076
21	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	1	0.000010	0.000030	0.000017	0.000013
21	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	1	0.000010	0.000040	0.000015	0.0000050
21	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	2	0.000020	0.000030	0.000022	0.0000076
21	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000040	0.000013	0.0000076
21	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	1	0.000010	0.000050	0.000020	0.000026
21	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000010	0.000040	0.000013	0.0000076
21	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	1	0.000010	0.000030	0.000013	0.0000076
21	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000010	0.000040	0.000013	0.0000076
21	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000010	0.000070	0.000048	0.000038
21	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000040	0.000013	0.0000076
21	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	1	0.000010	0.000030	0.000013	0.0000076
21	Dioxin/furans	OCDF	FS	3	2	0.000040	0.000090	0.000052	0.000034
21	Dioxin/furans	OCDF	WB	3	2	0.000020	0.000070	0.000043	0.000031
21	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	920	990	480	17
21	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	870	960	460	24
21	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	920	990	480	17
21	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	870	960	460	24
21	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	920	990	480	17
21	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	870	960	460	24
21	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	920	990	480	17
21	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	870	960	460	24
21	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	920	990	480	17
21	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	870	960	460	24
21	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	370	390	190	6.9
21	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	350	390	180	9.8
21	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	920	990	480	17
21	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	870	960	460	24
21	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	370	390	190	6.9
21	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	350	390	180	9.8
21	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	370	390	190	6.9
21	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	350	390	180	9.8
21	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	370	390	190	6.9
21	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	350	390	180	9.8
21	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	370	390	190	6.9
21	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	350	390	180	9.8
21	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	920	990	480	17
21	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	870	960	460	24
21	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	370	390	190	6.9
21	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	350	390	180	9.8
21	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	370	390	190	6.9
21	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	350	390	180	9.8
21	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	370	390	190	6.9
21	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	350	390	180	9.8
21	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	370	390	190	6.9
21	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	350	390	180	9.8
21	Guaiacols/Phenols	Phenol	FS	3	0	370	390	190	6.9
21	Guaiacols/Phenols	Phenol	WB	3	0	370	540	220	47
21	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
21	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
21	Metals	Antimony	FS	3	0	50	50	25	0.00
21	Metals	Antimony	WB	3	0	50	50	25	0.00
21	Metals	Arsenic	FS	3	3	660	1,100	870	220
21	Metals	Arsenic	WB	3	3	850	1,100	1,000	140
21	Metals	Barium	FS	3	0	200	200	100	0.00
21	Metals	Barium	WB	3	0	200	200	100	0.00

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
21	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
21	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
21	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
21	Metals	Cadmium	WB	3	3	6.1	8.0	7.2	0.97
21	Metals	Chromium	FS	3	3	370	420	390	26
21	Metals	Chromium	WB	3	3	460	540	490	41
21	Metals	Cobalt	FS	3	3	2.8	4.1	3.3	0.72
21	Metals	Cobalt	WB	3	3	92	240	170	74
21	Metals	Copper	FS	3	3	490	560	540	40
21	Metals	Copper	WB	3	3	1,100	1,400	1,300	170
21	Metals	Lead	FS	3	0	10	10	5.0	0.00
21	Metals	Lead	WB	3	0	10	10	5.0	0.00
21	Metals	Manganese	FS	3	3	71	74	72	1.5
21	Metals	Manganese	WB	3	3	270	330	300	30
21	Metals	Mercury	FS	3	0	90	110	50	5.3
21	Metals	Mercury	WB	3	0	110	120	57	2.3
21	Metals	Nickel	FS	3	0	30	30	15	0.00
21	Metals	Nickel	WB	3	3	570	1,600	970	570
21	Metals	Selenium	FS	3	3	350	400	380	26
21	Metals	Selenium	WB	3	3	410	510	450	51
21	Metals	Silver	FS	3	0	100	100	50	0.00
21	Metals	Silver	WB	3	0	100	100	50	0.00
21	Metals	Thallium	FS	3	0	50	50	25	0.00
21	Metals	Thallium	WB	3	0	50	50	25	0.00
21	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
21	Metals	Vanadium	WB	3	3	19	28	23	4.5
21	Metals	Zinc	FS	3	3	5,000	5,500	5,200	260
21	Metals	Zinc	WB	3	3	29,000	37,000	32,000	4,500
21	PCB	Aroclor 1016	FS	3	0	18	20	9.5	0.50
21	PCB	Aroclor 1016	WB	3	0	18	20	9.7	0.58
21	PCB	Aroclor 1221	FS	3	0	18	20	9.5	0.50
21	PCB	Aroclor 1221	WB	3	0	18	20	9.7	0.58
21	PCB	Aroclor 1232	FS	3	0	18	20	9.5	0.50
21	PCB	Aroclor 1232	WB	3	0	18	20	9.7	0.58
21	PCB	Aroclor 1242	FS	3	0	18	20	9.5	0.50
21	PCB	Aroclor 1242	WB	3	0	18	20	9.7	0.58
21	PCB	Aroclor 1248	FS	3	0	18	20	9.5	0.50
21	PCB	Aroclor 1248	WB	3	0	18	20	9.7	0.58
21	PCB	Aroclor 1254	FS	3	3	8.6	12	10	1.7
21	PCB	Aroclor 1254	WB	3	3	15	16	16	0.58
21	PCB	Aroclor 1260	FS	3	0	18	20	9.5	0.50
21	PCB	Aroclor 1260	WB	3	0	18	20	9.7	0.58
21	PCB	PCB 077	FS	3	3	0.0070	0.0083	0.0076	0.00066
21	PCB	PCB 077	WB	3	3	0.010	0.012	0.011	0.00084
21	PCB	PCB 105	FS	3	3	0.15	0.21	0.17	0.034
21	PCB	PCB 105	WB	3	3	0.23	0.27	0.24	0.025
21	PCB	PCB 114	FS	3	3	0.013	0.019	0.015	0.0032
21	PCB	PCB 114	WB	3	3	0.018	0.022	0.019	0.0020
21	PCB	PCB 118	FS	3	3	0.32	0.44	0.36	0.064
21	PCB	PCB 118	WB	3	3	0.50	0.57	0.52	0.043
21	PCB	PCB 123	FS	3	3	0.0044	0.0076	0.0061	0.0016
21	PCB	PCB 123	WB	3	3	0.0069	0.012	0.0097	0.0025
21	PCB	PCB 126	FS	3	0	0.0011	0.0017	0.00064	0.00016
21	PCB	PCB 126	WB	3	3	0.0015	0.0030	0.0023	0.00075
21	PCB	PCB 156	FS	3	3	0.030	0.045	0.037	0.0075
21	PCB	PCB 156	WB	3	3	0.044	0.053	0.048	0.0049
21	PCB	PCB 157	FS	3	3	0.0071	0.013	0.0095	0.0031
21	PCB	PCB 157	WB	3	3	0.013	0.015	0.014	0.0012
21	PCB	PCB 167	FS	3	3	0.019	0.023	0.020	0.0019
21	PCB	PCB 167	WB	3	3	0.026	0.032	0.028	0.0032
21	PCB	PCB 169	FS	3	0	0.00073	0.0010	0.00046	0.000081
21	PCB	PCB 169	WB	3	0	0.0010	0.0016	0.00067	0.00015
21	PCB	PCB 170	FS	3	3	0.063	0.095	0.080	0.016
21	PCB	PCB 170	WB	3	3	0.093	0.11	0.10	0.0068
21	PCB	PCB 180	FS	3	3	0.21	0.32	0.26	0.055
21	PCB	PCB 180	WB	3	3	0.31	0.35	0.33	0.023
21	PCB	PCB 189	FS	3	2	0.0011	0.0041	0.0028	0.0019
21	PCB	PCB 189	WB	3	2	0.0010	0.0048	0.0030	0.0022
21	Pesticides	Aldrin	FS	3	0	1.8	2.0	0.95	0.050
21	Pesticides	Aldrin	WB	3	0	1.8	2.0	0.97	0.058
21	Pesticides	Alpha-BHC	FS	3	0	1.8	2.0	0.95	0.050
21	Pesticides	Alpha-BHC	WB	3	0	1.8	2.0	0.97	0.058
21	Pesticides	Alpha-Chlordene	FS	3	0	1.8	2.0	0.95	0.050
21	Pesticides	Alpha-Chlordene	WB	3	0	1.8	2.0	0.97	0.058
21	Pesticides	Beta-BHC	FS	3	0	1.8	2.0	0.95	0.050
21	Pesticides	Beta-BHC	WB	3	0	1.8	2.0	0.97	0.058

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
21	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.8	2.0	0.95	0.050
21	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.8	2.0	0.97	0.058
21	Pesticides	cis-Nonachlor	FS	3	0	1.8	2.0	0.95	0.050
21	Pesticides	cis-Nonachlor	WB	3	0	1.8	2.0	0.97	0.058
21	Pesticides	DDD-o,p'	FS	3	0	1.8	2.0	0.95	0.050
21	Pesticides	DDD-o,p'	WB	3	0	1.8	2.0	0.97	0.058
21	Pesticides	DDE-o,p'	FS	3	0	1.8	2.0	0.95	0.050
21	Pesticides	DDE-o,p'	WB	3	3	0.99	1.1	1.1	0.064
21	Pesticides	DDT-o,p'	FS	3	0	1.8	2.0	0.95	0.050
21	Pesticides	DDT-o,p'	WB	3	0	1.8	2.0	0.97	0.058
21	Pesticides	DDD-p,p'	FS	3	3	1.3	1.5	1.4	0.12
21	Pesticides	DDD-p,p'	WB	3	3	2.6	3.5	3.0	0.47
21	Pesticides	DDE-p,p'	FS	3	3	6.6	9.1	7.7	1.3
21	Pesticides	DDE-p,p'	WB	3	3	11	12	12	0.58
21	Pesticides	DDT-p,p'	FS	3	3	1.5	2.5	1.8	0.58
21	Pesticides	DDT-p,p'	WB	3	3	3.7	4.9	4.2	0.61
21	Pesticides	DDMU	FS	3	0	1.8	2.0	0.95	0.050
21	Pesticides	DDMU	WB	3	0	1.8	2.0	0.97	0.058
21	Pesticides	Delta-BHC	FS	3	0	1.8	2.0	0.95	0.050
21	Pesticides	Delta-BHC	WB	3	0	1.8	2.0	0.97	0.058
21	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	na	na
21	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	na	na
21	Pesticides	Gamma-Chlordane	FS	3	0	1.8	2.0	0.95	0.050
21	Pesticides	Gamma-Chlordane	WB	3	0	1.8	2.0	0.97	0.058
21	Pesticides	gamma-Chlordane	FS	3	0	1.8	2.0	0.95	0.050
21	Pesticides	gamma-Chlordane	WB	3	0	1.8	2.0	0.97	0.058
21	Pesticides	Heptachlor	FS	3	0	1.8	2.0	0.95	0.050
21	Pesticides	Heptachlor	WB	3	0	1.8	2.0	0.97	0.058
21	Pesticides	Heptachlor Epoxide	FS	3	0	0.00	0.00	na	na
21	Pesticides	Heptachlor Epoxide	WB	3	0	0.00	0.00	na	na
21	Pesticides	Hexachlorobenzene	FS	3	2	1.6	2.6	1.7	0.85
21	Pesticides	Hexachlorobenzene	WB	3	3	3.1	3.6	3.3	0.25
21	Pesticides	Lindane	FS	3	0	1.8	2.0	0.95	0.050
21	Pesticides	Lindane	WB	3	0	1.8	2.0	0.97	0.058
21	Pesticides	Mirex	FS	3	0	1.8	2.0	0.95	0.050
21	Pesticides	Mirex	WB	3	0	1.8	2.0	0.97	0.058
21	Pesticides	Oxychlordane	FS	3	0	1.8	2.0	0.95	0.050
21	Pesticides	Oxychlordane	WB	3	0	1.8	2.0	0.97	0.058
21	Pesticides	Pentachloroanisol	FS	3	0	1.8	2.0	0.95	0.050
21	Pesticides	Pentachloroanisol	WB	3	3	0.72	1.1	0.90	0.19
21	Pesticides	Toxaphene	FS	3	0	53	59	28	1.5
21	Pesticides	Toxaphene	WB	3	0	54	60	29	1.6
21	Pesticides	trans-Nonachlor	FS	3	3	2.2	3.2	2.6	0.55
21	Pesticides	trans-Nonachlor	WB	3	3	3.8	4.3	4.1	0.29
21	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	18	20	9.6	0.34
21	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	17	19	9.2	0.49
21	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	37	39	19	0.69
21	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	35	39	18	0.98
21	Semivolatiles	2-Chloronaphthalene	FS	3	0	18	20	9.6	0.34
21	Semivolatiles	2-Chloronaphthalene	WB	3	0	17	19	9.2	0.49
21	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	Acenaphthene	FS	3	0	18	20	9.6	0.34
21	Semivolatiles	Acenaphthene	WB	3	0	17	19	9.2	0.49
21	Semivolatiles	Acenaphthylene	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	Acenaphthylene	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	Anthracene	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	Anthracene	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	18	20	9.6	0.34
21	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	17	19	9.2	0.49

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
21	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	18	20	9.6	0.34
21	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	17	19	9.2	0.49
21	Semivolatiles	Chrysene	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	Chrysene	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	18	20	9.6	0.34
21	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	17	19	9.2	0.49
21	Semivolatiles	Dibenzofuran	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	Dibenzofuran	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	Fluoranthene	FS	3	0	18	20	9.6	0.34
21	Semivolatiles	Fluoranthene	WB	3	0	17	19	9.2	0.49
21	Semivolatiles	9H-Fluorene	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	9H-Fluorene	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	Hexachloroethane	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	Hexachloroethane	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	18	20	9.6	0.34
21	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	17	19	9.2	0.49
21	Semivolatiles	Naphthalene	FS	3	0	12	20	8.6	2.2
21	Semivolatiles	Naphthalene	WB	3	0	14	20	9.0	1.6
21	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	Nitrobenzene	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	Nitrobenzene	WB	3	0	8.7	9.6	4.6	0.24
21	Semivolatiles	n-Nitrosodiphenylamine	FS	3	0	0.00	0.00	na	na
21	Semivolatiles	n-Nitrosodiphenylamine	WB	3	0	0.00	0.00	na	na
21	Semivolatiles	Phenanthrene	FS	3	0	9.2	9.9	4.8	0.18
21	Semivolatiles	Phenanthrene	WB	3	0	9.4	13	5.3	0.98
21	Semivolatiles	Pyrene	FS	3	0	18	20	9.6	0.34
21	Semivolatiles	Pyrene	WB	3	1	19	120	48	66
21	Semivolatiles	Retene	FS	3	0	18	20	9.6	0.34
21	Semivolatiles	Retene	WB	3	0	17	19	9.2	0.49
30	Dioxin/furans	2,3,7,8-TCDD	E	3	1	0.000010	0.000040	0.000018	0.000013
30	Dioxin/furans	2,3,7,8-TCDD	FS	3	0	0.000020	0.000040	0.000015	0.0000050
30	Dioxin/furans	2,3,7,8-TCDD	WB	3	1	0.000030	0.000040	0.000025	0.000013
30	Dioxin/furans	1,2,3,7,8-PeCDD	E	3	3	0.00014	0.00015	0.00015	0.0000058
30	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000020	0.00018	0.00011	0.000087
30	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	2	0.000030	0.00021	0.00013	0.00010
30	Dioxin/furans	1,2,3,4,7,8-HxCDD	E	3	2	0.000020	0.00012	0.000077	0.000059
30	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	1	0.000020	0.00013	0.000053	0.000067
30	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	3	0.00011	0.00014	0.00012	0.000015
30	Dioxin/furans	1,2,3,6,7,8-HxCDD	E	3	2	0.000020	0.000090	0.000053	0.000040
30	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	2	0.000020	0.000080	0.000053	0.000038
30	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	1	0.000040	0.000080	0.000040	0.000035
30	Dioxin/furans	1,2,3,7,8,9-HxCDD	E	3	2	0.000030	0.000050	0.000028	0.0000029
30	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000040	0.000060	0.000040	0.000020
30	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000040	0.000050	0.000040	0.000017
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	E	3	2	0.00013	0.00014	0.00011	0.000041
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.00013	0.00057	0.00028	0.00025
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	2	0.000080	0.00018	0.00013	0.000078
30	Dioxin/furans	OCDD	E	3	3	0.00024	0.00039	0.00034	0.000087
30	Dioxin/furans	OCDD	FS	3	1	0.000020	0.0027	0.00090	0.0015
30	Dioxin/furans	OCDD	WB	3	3	0.00022	0.00030	0.00027	0.000044
30	Dioxin/furans	2,3,7,8-TCDF	E	3	3	0.00036	0.00046	0.00043	0.000058
30	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00052	0.00066	0.00060	0.000072
30	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00061	0.00073	0.00067	0.000060
30	Dioxin/furans	1,2,3,7,8-PeCDF	E	3	0	0.000020	0.000030	0.000013	0.0000029
30	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	1	0.000030	0.00012	0.000052	0.000059
30	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.00011	0.00014	0.00012	0.000015
30	Dioxin/furans	2,3,4,7,8-PeCDF	E	3	2	0.000030	0.000090	0.000055	0.000038
30	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	1	0.000020	0.00011	0.000047	0.000055
30	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	1	0.000030	0.00017	0.000067	0.000089
30	Dioxin/furans	1,2,3,4,7,8-HxCDF	E	3	0	0.000010	0.000040	0.000013	0.0000076
30	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000020	0.000030	0.000012	0.0000029
30	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	0	0.000030	0.000040	0.000017	0.0000029
30	Dioxin/furans	1,2,3,6,7,8-HxCDF	E	3	1	0.000020	0.000040	0.000018	0.0000029
30	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	2	0.000030	0.000050	0.000035	0.000018
30	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	2	0.000040	0.000050	0.000040	0.000017
30	Dioxin/furans	1,2,3,7,8,9-HxCDF	E	3	0	0.000010	0.000040	0.000013	0.0000076
30	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	2	0.000020	0.000070	0.000047	0.000032

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	1	0.000030	0.000070	0.000035	0.000030
30	Dioxin/furans	2,3,4,6,7,8-HxCDF	E	3	3	0.00013	0.00014	0.00014	0.0000058
30	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	3	0.00013	0.00016	0.00014	0.000015
30	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00015	0.00017	0.00016	0.000010
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	E	3	1	0.000030	0.000060	0.000030	0.000026
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000050	0.00020	0.00010	0.000089
30	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	3	0.000080	0.000090	0.000087	0.0000058
30	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	E	3	0	0.000020	0.000030	0.000013	0.0000029
30	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000030	0.000050	0.000018	0.0000058
30	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000030	0.000060	0.000020	0.0000087
30	Dioxin/furans	OCDF	E	3	0	0.000030	0.000060	0.000020	0.0000087
30	Dioxin/furans	OCDF	FS	3	0	0.000040	0.000050	0.000023	0.0000029
30	Dioxin/furans	OCDF	WB	3	0	0.000050	0.000060	0.000027	0.0000029
30	Guaiacols/Phenols	4-Chloroguaiacol	E	3	0	750	2,500	700	470
30	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	850	960	450	30
30	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	810	960	440	37
30	Guaiacols/Phenols	3,4-Dichloroguaiacol	E	3	0	750	2,500	700	470
30	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	850	960	450	30
30	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	810	960	440	37
30	Guaiacols/Phenols	4,5-Dichloroguaiacol	E	3	0	750	2,500	700	470
30	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	850	960	450	30
30	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	810	960	440	37
30	Guaiacols/Phenols	4,6-Dichloroguaiacol	E	3	0	750	2,500	700	470
30	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	850	960	450	30
30	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	810	960	440	37
30	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	E	3	0	750	2,500	700	470
30	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	850	960	450	30
30	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	810	960	440	37
30	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	E	3	0	300	990	280	190
30	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	340	390	180	12
30	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	320	380	180	15
30	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	E	3	0	750	2,500	700	470
30	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	850	960	450	30
30	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	810	960	440	37
30	Guaiacols/Phenols	Tetrachloroguaiacol	E	3	0	300	990	280	190
30	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	340	390	180	12
30	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	320	380	180	15
30	Guaiacols/Phenols	2-Chlorophenol	E	3	0	300	990	280	190
30	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	340	390	180	12
30	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	320	380	180	15
30	Guaiacols/Phenols	4-Chloro-3-methylphenol	E	3	0	300	990	280	190
30	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	340	390	180	12
30	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	320	380	180	15
30	Guaiacols/Phenols	2,4-Dichlorophenol	E	3	0	300	990	280	190
30	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	340	390	180	12
30	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	320	380	180	15
30	Guaiacols/Phenols	2,4-Dimethylphenol	E	3	0	750	2,500	700	470
30	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	850	960	450	30
30	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	810	960	440	37
30	Guaiacols/Phenols	2,4,5-Trichlorophenol	E	3	0	300	990	280	190
30	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	340	390	180	12
30	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	320	380	180	15
30	Guaiacols/Phenols	2,4,6-Trichlorophenol	E	3	0	300	990	280	190
30	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	340	390	180	12
30	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	320	380	180	15
30	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	E	3	0	300	990	280	190
30	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	340	390	180	12
30	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	320	380	180	15
30	Guaiacols/Phenols	Pentachlorophenol	E	3	0	300	990	280	190
30	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	340	390	180	12
30	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	320	380	180	15
30	Guaiacols/Phenols	Phenol	E	3	0	300	990	280	190
30	Guaiacols/Phenols	Phenol	FS	3	0	360	390	190	7.1
30	Guaiacols/Phenols	Phenol	WB	3	0	320	380	180	15
30	Metals	Aluminum	E	3	0	1,000	1,000	500	0.00
30	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
30	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
30	Metals	Antimony	E	3	0	50	50	25	0.00
30	Metals	Antimony	FS	3	0	50	50	25	0.00
30	Metals	Antimony	WB	3	0	50	50	25	0.00
30	Metals	Arsenic	E	3	3	490	530	510	21
30	Metals	Arsenic	FS	3	3	730	880	810	75
30	Metals	Arsenic	WB	3	3	780	890	840	56
30	Metals	Barium	E	3	0	200	200	100	0.00
30	Metals	Barium	FS	3	0	200	200	100	0.00
30	Metals	Barium	WB	3	1	200	290	160	110

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Metals	Beryllium	E	3	0	4.0	4.0	2.0	0.00
30	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
30	Metals	Beryllium	WB	3	0	4.0	6.0	2.3	0.58
30	Metals	Cadmium	E	3	3	29	32	30	1.5
30	Metals	Cadmium	FS	3	3	11	15	13	2.1
30	Metals	Cadmium	WB	3	3	120	150	140	14
30	Metals	Chromium	E	3	2	100	110	90	35
30	Metals	Chromium	FS	3	0	100	100	50	0.00
30	Metals	Chromium	WB	3	2	100	160	120	59
30	Metals	Cobalt	E	3	3	52	67	58	8.1
30	Metals	Cobalt	FS	3	3	3.8	4.6	4.1	0.44
30	Metals	Cobalt	WB	3	3	55	220	120	85
30	Metals	Copper	E	3	3	6,400	6,600	6,500	95
30	Metals	Copper	FS	3	3	800	910	840	68
30	Metals	Copper	WB	3	3	1,200	1,600	1,400	180
30	Metals	Lead	E	3	1	10	19	9.7	8.1
30	Metals	Lead	FS	3	0	10	10	5.0	0.00
30	Metals	Lead	WB	3	3	12	14	13	1.2
30	Metals	Manganese	E	3	3	1,500	1,600	1,600	50
30	Metals	Manganese	FS	3	3	94	100	97	3.6
30	Metals	Manganese	WB	3	3	340	400	380	33
30	Metals	Mercury	E	3	0	79	92	43	3.3
30	Metals	Mercury	FS	3	1	95	130	74	45
30	Metals	Mercury	WB	3	2	71	120	80	36
30	Metals	Nickel	E	3	3	51	120	90	35
30	Metals	Nickel	FS	3	2	30	37	29	12
30	Metals	Nickel	WB	3	0	30	30	15	0.00
30	Metals	Selenium	E	3	3	3,700	5,500	4,300	980
30	Metals	Selenium	FS	3	3	390	430	410	21
30	Metals	Selenium	WB	3	3	520	620	570	47
30	Metals	Silver	E	3	0	100	100	50	0.00
30	Metals	Silver	FS	3	0	100	100	50	0.00
30	Metals	Silver	WB	3	0	100	200	67	29
30	Metals	Thallium	E	3	0	50	50	25	0.00
30	Metals	Thallium	FS	3	0	50	50	25	0.00
30	Metals	Thallium	WB	3	0	50	50	25	0.00
30	Metals	Vanadium	E	3	0	10	10	5.0	0.00
30	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
30	Metals	Vanadium	WB	3	2	10	24	14	9.6
30	Metals	Zinc	E	3	3	40,000	40,000	40,000	210
30	Metals	Zinc	FS	3	3	6,000	6,500	6,300	290
30	Metals	Zinc	WB	3	3	21,000	31,000	25,000	5,500
30	PCB	Aroclor 1016	E	3	0	19	38	16	5.5
30	PCB	Aroclor 1016	FS	3	0	35	38	18	0.76
30	PCB	Aroclor 1016	WB	3	0	34	42	19	2.0
30	PCB	Aroclor 1221	E	3	0	19	38	16	5.5
30	PCB	Aroclor 1221	FS	3	0	35	38	18	0.76
30	PCB	Aroclor 1221	WB	3	0	34	42	19	2.0
30	PCB	Aroclor 1232	E	3	0	19	38	16	5.5
30	PCB	Aroclor 1232	FS	3	0	35	38	18	0.76
30	PCB	Aroclor 1232	WB	3	0	34	42	19	2.0
30	PCB	Aroclor 1242	E	3	0	19	38	16	5.5
30	PCB	Aroclor 1242	FS	3	0	35	38	18	0.76
30	PCB	Aroclor 1242	WB	3	0	34	42	19	2.0
30	PCB	Aroclor 1248	E	3	0	19	38	16	5.5
30	PCB	Aroclor 1248	FS	3	0	35	38	18	0.76
30	PCB	Aroclor 1248	WB	3	0	34	42	19	2.0
30	PCB	Aroclor 1254	E	3	3	16	20	18	2.1
30	PCB	Aroclor 1254	FS	3	3	18	24	22	3.2
30	PCB	Aroclor 1254	WB	3	3	19	20	20	0.58
30	PCB	Aroclor 1260	E	3	0	19	38	16	5.5
30	PCB	Aroclor 1260	FS	3	0	35	38	18	0.76
30	PCB	Aroclor 1260	WB	3	0	34	42	19	2.0
30	PCB	PCB 077	E	3	3	0.0095	0.011	0.010	0.00056
30	PCB	PCB 077	FS	3	3	0.011	0.013	0.012	0.0011
30	PCB	PCB 077	WB	3	3	0.012	0.014	0.013	0.00061
30	PCB	PCB 105	E	3	3	0.17	0.19	0.18	0.0090
30	PCB	PCB 105	FS	3	3	0.22	0.24	0.23	0.0081
30	PCB	PCB 105	WB	3	3	0.23	0.29	0.26	0.029
30	PCB	PCB 114	E	3	3	0.015	0.020	0.017	0.0029
30	PCB	PCB 114	FS	3	3	0.020	0.022	0.021	0.0013
30	PCB	PCB 114	WB	3	3	0.022	0.026	0.025	0.0023
30	PCB	PCB 118	E	3	3	0.40	0.44	0.41	0.023
30	PCB	PCB 118	FS	3	3	0.52	0.56	0.54	0.023
30	PCB	PCB 118	WB	3	3	0.54	0.67	0.61	0.063
30	PCB	PCB 123	E	3	3	0.0049	0.011	0.0080	0.0029

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	PCB	PCB 123	FS	3	3	0.0090	0.013	0.011	0.0022
30	PCB	PCB 123	WB	3	3	0.011	0.016	0.013	0.0025
30	PCB	PCB 126	E	3	2	0.00090	0.0023	0.0017	0.0010
30	PCB	PCB 126	FS	3	3	0.0031	0.0036	0.0033	0.00030
30	PCB	PCB 126	WB	3	3	0.0032	0.0036	0.0034	0.00018
30	PCB	PCB 156	E	3	3	0.024	0.026	0.025	0.0011
30	PCB	PCB 156	FS	3	3	0.043	0.046	0.044	0.0013
30	PCB	PCB 156	WB	3	3	0.041	0.056	0.048	0.0076
30	PCB	PCB 157	E	3	3	0.0070	0.011	0.0086	0.0021
30	PCB	PCB 157	FS	3	3	0.011	0.012	0.012	0.00045
30	PCB	PCB 157	WB	3	3	0.011	0.015	0.013	0.0019
30	PCB	PCB 167	E	3	3	0.016	0.018	0.017	0.00089
30	PCB	PCB 167	FS	3	3	0.029	0.030	0.029	0.00091
30	PCB	PCB 167	WB	3	3	0.028	0.034	0.031	0.0032
30	PCB	PCB 169	E	3	0	0.0010	0.0010	0.00050	0.00
30	PCB	PCB 169	FS	3	0	0.0010	0.0012	0.00053	0.000046
30	PCB	PCB 169	WB	3	0	0.0010	0.0011	0.00052	0.000029
30	PCB	PCB 170	E	3	3	0.047	0.051	0.049	0.0021
30	PCB	PCB 170	FS	3	3	0.081	0.100	0.091	0.0096
30	PCB	PCB 170	WB	3	3	0.074	0.098	0.089	0.013
30	PCB	PCB 180	E	3	3	0.13	0.14	0.14	0.0029
30	PCB	PCB 180	FS	3	3	0.24	0.28	0.26	0.021
30	PCB	PCB 180	WB	3	3	0.23	0.30	0.27	0.037
30	PCB	PCB 189	E	3	3	0.0013	0.0017	0.0015	0.00020
30	PCB	PCB 189	FS	3	3	0.0028	0.0032	0.0030	0.00018
30	PCB	PCB 189	WB	3	3	0.0026	0.0034	0.0030	0.00040
30	Pesticides	Aldrin	E	3	0	1.9	3.8	1.6	0.55
30	Pesticides	Aldrin	FS	3	0	3.5	3.8	1.8	0.076
30	Pesticides	Aldrin	WB	3	0	3.4	4.2	1.9	0.20
30	Pesticides	Alpha-BHC	E	3	0	1.9	3.8	1.6	0.55
30	Pesticides	Alpha-BHC	FS	3	0	3.5	3.8	1.8	0.076
30	Pesticides	Alpha-BHC	WB	3	0	3.4	4.2	1.9	0.20
30	Pesticides	Alpha-Chlordene	E	3	0	1.9	3.8	1.6	0.55
30	Pesticides	Alpha-Chlordene	FS	3	0	3.5	3.8	1.8	0.076
30	Pesticides	Alpha-Chlordene	WB	3	0	3.4	4.2	1.9	0.20
30	Pesticides	Beta-BHC	E	3	0	1.9	3.8	1.6	0.55
30	Pesticides	Beta-BHC	FS	3	0	3.5	3.8	1.8	0.076
30	Pesticides	Beta-BHC	WB	3	0	3.4	4.2	1.9	0.20
30	Pesticides	cis-Chlordane (alpha-Chlordane)	E	3	0	1.9	3.8	1.6	0.55
30	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	3.5	3.8	1.8	0.076
30	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	3.4	4.2	1.9	0.20
30	Pesticides	cis-Nonachlor	E	3	0	1.9	3.8	1.6	0.55
30	Pesticides	cis-Nonachlor	FS	3	0	3.5	3.8	1.8	0.076
30	Pesticides	cis-Nonachlor	WB	3	0	3.4	4.2	1.9	0.20
30	Pesticides	DDD-o,p'	E	3	0	1.9	3.8	1.6	0.55
30	Pesticides	DDD-o,p'	FS	3	0	3.5	3.8	1.8	0.076
30	Pesticides	DDD-o,p'	WB	3	0	3.4	4.2	1.9	0.20
30	Pesticides	DDE-o,p'	E	3	0	1.9	3.8	1.6	0.55
30	Pesticides	DDE-o,p'	FS	3	0	3.5	3.8	1.8	0.076
30	Pesticides	DDE-o,p'	WB	3	0	3.4	4.2	1.9	0.20
30	Pesticides	DDT-o,p'	E	3	0	1.9	3.8	1.6	0.55
30	Pesticides	DDT-o,p'	FS	3	0	3.5	3.8	1.8	0.076
30	Pesticides	DDT-o,p'	WB	3	0	3.4	4.2	1.9	0.20
30	Pesticides	DDD-p,p'	E	3	3	2.5	3.1	2.8	0.30
30	Pesticides	DDD-p,p'	FS	3	3	2.6	3.0	2.8	0.21
30	Pesticides	DDD-p,p'	WB	3	2	2.7	4.2	2.6	0.46
30	Pesticides	DDE-p,p'	E	3	3	9.7	10	9.8	0.15
30	Pesticides	DDE-p,p'	FS	3	3	9.9	13	11	1.6
30	Pesticides	DDE-p,p'	WB	3	3	11	13	12	1.2
30	Pesticides	DDT-p,p'	E	3	3	4.0	4.2	4.1	0.10
30	Pesticides	DDT-p,p'	FS	3	3	4.0	5.0	4.6	0.55
30	Pesticides	DDT-p,p'	WB	3	3	3.9	5.8	4.6	1.0
30	Pesticides	DDMU	E	3	0	1.9	3.8	1.6	0.55
30	Pesticides	DDMU	FS	3	0	3.5	3.8	1.8	0.076
30	Pesticides	DDMU	WB	3	0	3.4	4.2	1.9	0.20
30	Pesticides	Delta-BHC	E	3	0	1.9	3.8	1.6	0.55
30	Pesticides	Delta-BHC	FS	3	0	3.5	3.8	1.8	0.076
30	Pesticides	Delta-BHC	WB	3	0	3.4	4.2	1.9	0.20
30	Pesticides	Endosulfan Sulfate	E	3	0	0.00	0.00	na	na
30	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	na	na
30	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	na	na
30	Pesticides	Gamma-Chlordane	E	3	0	1.9	3.8	1.6	0.55
30	Pesticides	Gamma-Chlordane	FS	3	0	3.5	3.8	1.8	0.076
30	Pesticides	gamma-Chlordene	WB	3	0	3.4	4.2	1.9	0.20
30	Pesticides	gamma-Chlordene	E	3	0	1.9	3.8	1.6	0.55
30	Pesticides	gamma-Chlordene	FS	3	0	3.5	3.8	1.8	0.076

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Pesticides	gamma-Chlordene	WB	3	0	3.4	4.2	1.9	0.20
30	Pesticides	Heptachlor	E	3	0	1.9	3.8	1.6	0.55
30	Pesticides	Heptachlor	FS	3	0	3.5	3.8	1.8	0.076
30	Pesticides	Heptachlor	WB	3	0	3.4	4.2	1.9	0.20
30	Pesticides	Heptachlor Epoxide	E	3	0	1.9	3.8	1.6	0.55
30	Pesticides	Heptachlor Epoxide	FS	3	0	3.5	3.8	1.8	0.076
30	Pesticides	Heptachlor Epoxide	WB	3	0	3.4	4.2	1.9	0.20
30	Pesticides	Hexachlorobenzene	E	3	3	3.4	3.8	3.6	0.21
30	Pesticides	Hexachlorobenzene	FS	3	3	2.7	3.5	3.1	0.40
30	Pesticides	Hexachlorobenzene	WB	3	3	2.7	3.3	3.0	0.30
30	Pesticides	Lindane	E	3	1	1.9	3.8	1.6	0.55
30	Pesticides	Lindane	FS	3	0	3.5	3.8	1.8	0.076
30	Pesticides	Lindane	WB	3	0	3.4	4.2	1.9	0.20
30	Pesticides	Mirex	E	3	0	1.9	3.8	1.6	0.55
30	Pesticides	Mirex	FS	3	0	3.5	3.8	1.8	0.076
30	Pesticides	Mirex	WB	3	0	3.4	4.2	1.9	0.20
30	Pesticides	Oxychlordane	E	3	0	1.9	3.8	1.6	0.55
30	Pesticides	Oxychlordane	FS	3	0	3.5	3.8	1.8	0.076
30	Pesticides	Oxychlordane	WB	3	0	3.4	4.2	1.9	0.20
30	Pesticides	Pentachloroanisol	E	3	0	1.9	3.8	1.6	0.55
30	Pesticides	Pentachloroanisol	FS	3	0	3.5	3.8	1.8	0.076
30	Pesticides	Pentachloroanisol	WB	3	0	3.4	4.2	1.9	0.20
30	Pesticides	Toxaphene	E	3	0	56	110	46	16
30	Pesticides	Toxaphene	FS	3	0	110	110	55	0.00
30	Pesticides	Toxaphene	WB	3	0	100	120	55	5.0
30	Pesticides	trans-Nonachlor	E	3	1	3.2	3.8	2.3	0.75
30	Pesticides	trans-Nonachlor	FS	3	0	3.5	3.8	1.8	0.076
30	Pesticides	trans-Nonachlor	WB	3	0	3.4	4.2	1.9	0.20
30	Semivolatiles	1,2,4-Trichlorobenzene	E	3	0	9.7	37	12	6.9
30	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	1,2-Diphenylhydrazine	E	3	0	9.7	37	12	6.9
30	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	2,4-Dinitrotoluene	E	3	0	19	74	24	14
30	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	17	19	9.1	0.60
30	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	18	81	20	18
30	Semivolatiles	2,6-Dinitrotoluene	E	3	0	39	150	48	28
30	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	34	39	18	1.2
30	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	36	160	39	36
30	Semivolatiles	2-Chloronaphthalene	E	3	0	19	74	24	14
30	Semivolatiles	2-Chloronaphthalene	FS	3	0	17	19	9.1	0.60
30	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	81	20	18
30	Semivolatiles	4-Bromophenyl-Phenylether	E	3	0	9.7	37	12	6.9
30	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	4-Chlorophenyl-Phenylether	E	3	0	9.7	37	12	6.9
30	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	Acenaphthene	E	3	1	26	74	29	6.9
30	Semivolatiles	Acenaphthene	FS	3	0	17	19	9.1	0.60
30	Semivolatiles	Acenaphthene	WB	3	0	18	81	20	18
30	Semivolatiles	Acenaphthylene	E	3	0	9.7	37	12	6.9
30	Semivolatiles	Acenaphthylene	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	Acenaphthylene	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	Anthracene	E	3	0	9.7	37	12	6.9
30	Semivolatiles	Anthracene	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	Anthracene	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	Benzene, 1,2-dichloro-	E	3	0	9.7	37	12	6.9
30	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	Benzene, 1,3-dichloro-	E	3	0	9.7	37	12	6.9
30	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	Benzene, 1,4-dichloro-	E	3	0	9.7	37	12	6.9
30	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	Benzo(a)anthracene	E	3	0	9.7	37	12	6.9
30	Semivolatiles	Benzo(a)anthracene	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	Benzo(a)pyrene	E	3	0	9.7	37	12	6.9
30	Semivolatiles	Benzo(a)pyrene	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	Benzo(g,h,i)perylene	E	3	0	19	74	24	14
30	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	17	19	9.1	0.60
30	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	81	20	18

Appendix D-1: Site Summary Statistics
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Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
30	Semivolatiles	Benzo[b]Fluoranthene	E	3	0	9.7	37	12	6.9
30	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	Benzo[k]fluoranthene	E	3	0	9.7	37	12	6.9
30	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	bis(2-Chloroisopropyl)ether	E	3	0	19	74	24	14
30	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	17	19	9.1	0.60
30	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	81	20	18
30	Semivolatiles	Chrysene	E	3	0	9.7	37	12	6.9
30	Semivolatiles	Chrysene	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	Chrysene	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	Dibenz[a,h]anthracene	E	3	0	19	74	24	14
30	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	17	19	9.1	0.60
30	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	81	20	18
30	Semivolatiles	Dibenzofuran	E	3	0	9.7	37	12	6.9
30	Semivolatiles	Dibenzofuran	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	Dibenzofuran	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	Fluoranthene	E	3	0	19	74	24	14
30	Semivolatiles	Fluoranthene	FS	3	0	17	19	9.1	0.60
30	Semivolatiles	Fluoranthene	WB	3	0	18	81	20	18
30	Semivolatiles	9H-Fluorene	E	3	0	9.7	37	12	6.9
30	Semivolatiles	9H-Fluorene	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	9H-Fluorene	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	Hexachlorobutadiene	E	3	0	9.7	37	12	6.9
30	Semivolatiles	Hexachlorobutadiene	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	Hexachloroethane	E	3	0	9.7	37	12	6.9
30	Semivolatiles	Hexachloroethane	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	Hexachloroethane	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	Indeno(1,2,3-cd)pyrene	E	3	0	19	74	24	14
30	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	17	19	9.1	0.60
30	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	81	20	18
30	Semivolatiles	Naphthalene	E	3	0	44	110	34	18
30	Semivolatiles	Naphthalene	FS	3	0	33	45	19	3.3
30	Semivolatiles	Naphthalene	WB	3	0	33	170	42	38
30	Semivolatiles	Naphthalene, 1-methyl-	E	3	0	9.7	37	12	6.9
30	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	Naphthalene, 2-methyl-	E	3	0	14	37	13	5.9
30	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	9.6	40	10	8.7
30	Semivolatiles	Nitrobenzene	E	3	0	9.7	37	12	6.9
30	Semivolatiles	Nitrobenzene	FS	3	0	8.5	9.6	4.5	0.28
30	Semivolatiles	Nitrobenzene	WB	3	0	8.9	40	9.8	9.0
30	Semivolatiles	n-Nitrosodiphenylamine	E	3	0	0.00	0.00	na	na
30	Semivolatiles	n-Nitrosodiphenylamine	FS	3	0	0.00	0.00	na	na
30	Semivolatiles	n-Nitrosodiphenylamine	WB	3	0	0.00	0.00	na	na
30	Semivolatiles	Phenanthrene	E	3	0	9.7	37	12	6.9
30	Semivolatiles	Phenanthrene	FS	3	0	8.8	13	5.5	0.97
30	Semivolatiles	Phenanthrene	WB	3	0	9.6	40	10	8.5
30	Semivolatiles	Pyrene	E	3	0	19	74	24	14
30	Semivolatiles	Pyrene	FS	3	0	17	19	9.1	0.60
30	Semivolatiles	Pyrene	WB	3	0	18	81	20	18
30	Semivolatiles	Retene	E	3	0	19	74	24	14
30	Semivolatiles	Retene	FS	3	0	17	19	9.1	0.60
30	Semivolatiles	Retene	WB	3	0	18	81	20	18
48	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000020	0.000040	0.000022	0.000016
48	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000020	0.00010	0.000025	0.000022
48	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000020	0.000090	0.000038	0.000045
48	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.000090	0.00038	0.00022	0.00015
48	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000030	0.000030	0.000015	0.00
48	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	2	0.000030	0.00019	0.00011	0.000089
48	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.000060	0.000060	0.000060	0.00
48	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	3	0.000070	0.00025	0.00013	0.00010
48	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000030	0.000040	0.000023	0.000014
48	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000030	0.000050	0.000035	0.000018
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000040	0.00010	0.000067	0.000042
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.000090	0.00043	0.00023	0.00018
48	Dioxin/furans	OCDD	FS	3	2	0.00010	0.00022	0.00014	0.000085
48	Dioxin/furans	OCDD	WB	3	3	0.00016	0.00095	0.00046	0.00043
48	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00064	0.00072	0.00068	0.000040
48	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00057	0.0010	0.00077	0.00024
48	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.00010	0.00012	0.00011	0.000010
48	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	2	0.000020	0.00036	0.00016	0.00018
48	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00013	0.00017	0.00015	0.000020

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00016	0.00026	0.00019	0.000058
48	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	1	0.000020	0.000030	0.000017	0.000012
48	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	1	0.000010	0.00015	0.000055	0.000082
48	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000020	0.000020	0.000020	0.00
48	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	1	0.000010	0.00013	0.000048	0.000071
48	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
48	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
48	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	1	0.000020	0.000030	0.000017	0.000012
48	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.000030	0.00034	0.00017	0.00016
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000040	0.000050	0.000022	0.0000029
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000040	0.00020	0.000097	0.000093
48	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000040	0.000050	0.000022	0.0000029
48	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000020	0.000040	0.000015	0.0000050
48	Dioxin/furans	OCDF	FS	3	0	0.000050	0.000090	0.000032	0.000012
48	Dioxin/furans	OCDF	WB	3	1	0.000040	0.00013	0.000058	0.000062
48	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	490	500	250	1.4
48	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	490	2,500	890	560
48	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	490	500	250	1.4
48	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	490	2,500	890	560
48	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	490	500	250	1.4
48	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	490	2,500	890	560
48	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	490	500	250	1.4
48	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	490	2,500	890	560
48	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	490	500	250	1.4
48	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	490	2,500	890	560
48	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	200	200	99	0.58
48	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	190	990	360	230
48	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	490	500	250	1.4
48	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	490	2,500	890	560
48	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	200	200	99	0.58
48	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	190	990	360	230
48	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	200	200	99	0.58
48	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	190	990	360	230
48	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	200	200	99	0.58
48	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	190	990	360	230
48	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	200	200	99	0.58
48	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	190	990	360	230
48	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	490	500	250	1.4
48	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	490	2,500	890	560
48	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	200	200	99	0.58
48	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	190	990	360	230
48	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	200	200	99	0.58
48	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	190	990	360	230
48	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	200	200	99	0.58
48	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	190	990	360	230
48	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	200	200	99	0.58
48	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	190	990	360	230
48	Guaiacols/Phenols	Phenol	FS	3	0	200	200	99	0.58
48	Guaiacols/Phenols	Phenol	WB	3	0	190	990	360	230
48	Metals	Aluminum	FS	3	1	1,000	1,100	700	350
48	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
48	Metals	Antimony	FS	3	0	50	50	25	0.00
48	Metals	Antimony	WB	3	0	50	50	25	0.00
48	Metals	Arsenic	FS	3	3	760	850	820	51
48	Metals	Arsenic	WB	3	3	860	940	890	43
48	Metals	Barium	FS	3	0	200	200	100	0.00
48	Metals	Barium	WB	3	0	200	200	100	0.00
48	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
48	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
48	Metals	Cadmium	FS	3	3	8.4	10	9.0	0.87
48	Metals	Cadmium	WB	3	3	110	140	130	15
48	Metals	Chromium	FS	3	0	100	100	50	0.00
48	Metals	Chromium	WB	3	2	100	120	90	36
48	Metals	Cobalt	FS	3	3	3.8	4.4	4.2	0.35
48	Metals	Cobalt	WB	3	3	77	90	84	6.5
48	Metals	Copper	FS	3	3	720	820	760	53
48	Metals	Copper	WB	3	3	1,200	1,300	1,300	49
48	Metals	Lead	FS	3	0	10	10	5.0	0.00
48	Metals	Lead	WB	3	3	10	12	11	1.2
48	Metals	Manganese	FS	3	3	86	110	97	11
48	Metals	Manganese	WB	3	3	340	450	400	54
48	Metals	Mercury	FS	3	0	98	100	50	1.0
48	Metals	Mercury	WB	3	0	96	100	50	1.5
48	Metals	Nickel	FS	3	1	30	31	20	9.2
48	Metals	Nickel	WB	3	0	30	30	15	0.00
48	Metals	Selenium	FS	3	3	380	390	380	5.8

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Metals	Selenium	WB	3	3	460	680	570	110
48	Metals	Silver	FS	3	0	100	100	50	0.00
48	Metals	Silver	WB	3	0	100	100	50	0.00
48	Metals	Thallium	FS	3	0	50	50	25	0.00
48	Metals	Thallium	WB	3	0	50	50	25	0.00
48	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
48	Metals	Vanadium	WB	3	3	10	18	13	4.4
48	Metals	Zinc	FS	3	3	6,600	7,100	6,900	230
48	Metals	Zinc	WB	3	3	23,000	30,000	25,000	3,800
48	PCB	Aroclor 1016	FS	3	0	19	19	9.5	0.00
48	PCB	Aroclor 1016	WB	3	0	19	20	9.7	0.29
48	PCB	Aroclor 1221	FS	3	0	19	19	9.5	0.00
48	PCB	Aroclor 1221	WB	3	0	19	20	9.7	0.29
48	PCB	Aroclor 1232	FS	3	0	19	19	9.5	0.00
48	PCB	Aroclor 1232	WB	3	0	19	20	9.7	0.29
48	PCB	Aroclor 1242	FS	3	0	19	19	9.5	0.00
48	PCB	Aroclor 1242	WB	3	0	19	20	9.7	0.29
48	PCB	Aroclor 1248	FS	3	0	19	19	9.5	0.00
48	PCB	Aroclor 1248	WB	3	0	19	20	9.7	0.29
48	PCB	Aroclor 1254	FS	3	3	15	18	17	1.7
48	PCB	Aroclor 1254	WB	3	3	16	19	18	1.5
48	PCB	Aroclor 1260	FS	3	0	19	19	9.5	0.00
48	PCB	Aroclor 1260	WB	3	0	19	20	9.7	0.29
48	PCB	PCB 077	FS	3	3	0.011	0.012	0.012	0.00032
48	PCB	PCB 077	WB	3	3	0.0090	0.014	0.012	0.0026
48	PCB	PCB 105	FS	3	3	0.23	0.24	0.23	0.0025
48	PCB	PCB 105	WB	3	3	0.24	0.25	0.24	0.0040
48	PCB	PCB 114	FS	3	3	0.020	0.022	0.021	0.0010
48	PCB	PCB 114	WB	3	3	0.022	0.023	0.022	0.00053
48	PCB	PCB 118	FS	3	3	0.53	0.55	0.54	0.011
48	PCB	PCB 118	WB	3	3	0.55	0.56	0.55	0.0042
48	PCB	PCB 123	FS	3	3	0.011	0.013	0.012	0.00087
48	PCB	PCB 123	WB	3	3	0.0080	0.012	0.0095	0.0019
48	PCB	PCB 126	FS	3	3	0.0027	0.0034	0.0030	0.00037
48	PCB	PCB 126	WB	3	1	0.0014	0.0031	0.0015	0.0013
48	PCB	PCB 156	FS	3	3	0.039	0.042	0.040	0.0016
48	PCB	PCB 156	WB	3	3	0.040	0.045	0.042	0.0024
48	PCB	PCB 157	FS	3	3	0.010	0.011	0.011	0.00064
48	PCB	PCB 157	WB	3	3	0.011	0.013	0.012	0.0010
48	PCB	PCB 167	FS	3	3	0.029	0.030	0.030	0.00072
48	PCB	PCB 167	WB	3	3	0.028	0.029	0.029	0.00087
48	PCB	PCB 169	FS	3	0	0.0010	0.0013	0.00058	0.000073
48	PCB	PCB 169	WB	3	0	0.0010	0.0013	0.00055	0.000078
48	PCB	PCB 170	FS	3	3	0.077	0.090	0.086	0.0075
48	PCB	PCB 170	WB	3	3	0.084	0.094	0.088	0.0047
48	PCB	PCB 180	FS	3	3	0.26	0.27	0.27	0.0040
48	PCB	PCB 180	WB	3	3	0.24	0.26	0.25	0.012
48	PCB	PCB 189	FS	3	3	0.0027	0.0028	0.0027	0.000062
48	PCB	PCB 189	WB	3	2	0.0025	0.0028	0.0022	0.00087
48	Pesticides	Aldrin	FS	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Aldrin	WB	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Alpha-BHC	FS	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Alpha-BHC	WB	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Alpha-Chlordane	FS	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Alpha-Chlordane	WB	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Beta-BHC	FS	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Beta-BHC	WB	3	0	1.9	2.0	0.97	0.029
48	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.9	2.0	0.97	0.029
48	Pesticides	cis-Nonachlor	FS	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	cis-Nonachlor	WB	3	0	1.9	2.0	0.97	0.029
48	Pesticides	DDD-o,p'	FS	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	DDD-o,p'	WB	3	0	1.9	2.0	0.97	0.029
48	Pesticides	DDE-o,p'	FS	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	DDE-o,p'	WB	3	0	1.9	2.0	0.97	0.029
48	Pesticides	DDT-o,p'	FS	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	DDT-o,p'	WB	3	0	1.9	2.0	0.97	0.029
48	Pesticides	DDD-p,p'	FS	3	3	2.2	2.9	2.6	0.35
48	Pesticides	DDD-p,p'	WB	3	3	3.0	4.2	3.5	0.64
48	Pesticides	DDE-p,p'	FS	3	3	16	17	16	0.58
48	Pesticides	DDE-p,p'	WB	3	3	15	20	18	2.5
48	Pesticides	DDT-p,p'	FS	3	3	6.3	7.1	6.6	0.46
48	Pesticides	DDT-p,p'	WB	3	3	6.6	8.0	7.1	0.78
48	Pesticides	DDMU	FS	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	DDMU	WB	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Delta-BHC	FS	3	0	1.9	1.9	0.95	1.5E-08

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Pesticides	Delta-BHC	WB	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	na	na
48	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	na	na
48	Pesticides	Gamma-Chlordane	FS	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Gamma-Chlordane	WB	3	0	1.9	2.0	0.97	0.029
48	Pesticides	gamma-Chlordene	FS	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	gamma-Chlordene	WB	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Heptachlor	FS	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Heptachlor	WB	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Heptachlor Epoxide	FS	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Hexachlorobenzene	FS	3	3	2.4	3.2	2.8	0.40
48	Pesticides	Hexachlorobenzene	WB	3	3	2.8	3.8	3.4	0.51
48	Pesticides	Lindane	FS	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Lindane	WB	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Mirex	FS	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Mirex	WB	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Oxychlordane	FS	3	0	1.9	1.9	0.95	1.5E-08
48	Pesticides	Oxychlordane	WB	3	0	1.9	2.0	0.97	0.029
48	Pesticides	Pentachloroanisol	FS	3	1	0.78	1.9	0.89	0.098
48	Pesticides	Pentachloroanisol	WB	3	1	1.1	2.0	1.0	0.076
48	Pesticides	Toxaphene	FS	3	0	56	58	29	0.50
48	Pesticides	Toxaphene	WB	3	0	57	59	29	0.58
48	Pesticides	trans-Nonachlor	FS	3	3	3.2	3.4	3.3	0.10
48	Pesticides	trans-Nonachlor	WB	3	3	3.7	4.2	3.9	0.25
48	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	4.9	5.0	2.5	0.029
48	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	4.9	5.0	2.5	0.029
48	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	9.9	10	5.0	0.029
48	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	9.7	50	18	11
48	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	20	20	9.9	0.058
48	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	19	99	36	23
48	Semivolatiles	2-Chloronaphthalene	FS	3	0	9.9	10	5.0	0.029
48	Semivolatiles	2-Chloronaphthalene	WB	3	0	9.7	50	18	11
48	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	4.9	5.0	2.5	0.029
48	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	4.9	5.0	2.5	0.029
48	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	Acenaphthene	FS	3	0	9.9	10	5.0	0.029
48	Semivolatiles	Acenaphthene	WB	3	0	9.7	50	18	11
48	Semivolatiles	Acenaphthylene	FS	3	0	4.9	5.0	2.5	0.029
48	Semivolatiles	Acenaphthylene	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	Anthracene	FS	3	0	4.9	5.0	2.5	0.029
48	Semivolatiles	Anthracene	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	4.9	5.0	2.5	0.029
48	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	4.9	5.0	2.5	0.029
48	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	4.9	5.0	2.5	0.029
48	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	Benzo(a)anthracene	FS	3	0	4.9	25	9.1	5.7
48	Semivolatiles	Benzo(a)anthracene	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	Benzo(a)pyrene	FS	3	0	4.9	25	9.1	5.7
48	Semivolatiles	Benzo(a)pyrene	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	9.9	50	18	11
48	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	9.7	50	18	11
48	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	4.9	25	9.1	5.7
48	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	4.9	25	9.1	5.7
48	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	9.9	10	5.0	0.029
48	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	9.7	50	18	11
48	Semivolatiles	Chrysene	FS	3	0	4.9	25	9.1	5.7
48	Semivolatiles	Chrysene	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	9.9	50	18	11
48	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	9.7	50	18	11
48	Semivolatiles	Dibenzofuran	FS	3	0	4.9	5.0	2.5	0.029
48	Semivolatiles	Dibenzofuran	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	Fluoranthene	FS	3	0	9.9	10	5.0	0.029
48	Semivolatiles	Fluoranthene	WB	3	0	9.7	50	18	11
48	Semivolatiles	9H-Fluorene	FS	3	0	4.9	5.0	2.5	0.029
48	Semivolatiles	9H-Fluorene	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	Hexachlorobutadiene	FS	3	0	4.9	5.0	2.5	0.029
48	Semivolatiles	Hexachlorobutadiene	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	Hexachloroethane	FS	3	0	4.9	5.0	2.5	0.029

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Semivolatiles	Hexachloroethane	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	9.9	50	18	11
48	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	9.7	50	18	11
48	Semivolatiles	Naphthalene	FS	3	0	27	43	17	4.0
48	Semivolatiles	Naphthalene	WB	3	0	25	67	24	11
48	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	4.9	5.0	2.5	0.029
48	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	4.9	6.0	2.7	0.28
48	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	4.8	27	9.2	5.9
48	Semivolatiles	Nitrobenzene	FS	3	0	4.9	5.0	2.5	0.029
48	Semivolatiles	Nitrobenzene	WB	3	0	4.8	25	8.9	5.6
48	Semivolatiles	n-Nitrosodiphenylamine	FS	3	0	0.00	0.00	na	na
48	Semivolatiles	n-Nitrosodiphenylamine	WB	3	0	0.00	0.00	na	na
48	Semivolatiles	Phenanthrene	FS	3	0	4.9	7.4	3.0	0.64
48	Semivolatiles	Phenanthrene	WB	3	0	5.8	25	9.1	5.4
48	Semivolatiles	Pyrene	FS	3	0	9.9	50	18	11
48	Semivolatiles	Pyrene	WB	3	0	9.7	50	18	11
48	Semivolatiles	Retene	FS	3	0	9.9	50	18	11
48	Semivolatiles	Retene	WB	3	0	9.7	50	18	11
51	Dioxin/furans	2,3,7,8-TCDD	FS	3	3	0.000030	0.000050	0.000040	0.000010
51	Dioxin/furans	2,3,7,8-TCDD	WB	3	1	0.000020	0.000040	0.000020	0.000010
51	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	3	0.00010	0.00013	0.00012	0.000017
51	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	2	0.000030	0.00017	0.000098	0.000078
51	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	1	0.000010	0.000040	0.000017	0.000020
51	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	1	0.000020	0.000060	0.000030	0.000020
51	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.000080	0.00012	0.00010	0.000020
51	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	1	0.000010	0.00010	0.000045	0.000049
51	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000010	0.000060	0.000023	0.000032
51	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	3	0.000060	0.00012	0.000087	0.000031
51	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.000080	0.00016	0.00012	0.000040
51	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00016	0.00020	0.00018	0.000021
51	Dioxin/furans	OCDD	FS	3	2	0.000030	0.00044	0.00019	0.00022
51	Dioxin/furans	OCDD	WB	3	3	0.00034	0.00047	0.00041	0.000067
51	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00065	0.00069	0.00067	0.000021
51	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00076	0.00085	0.00080	0.000046
51	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.00012	0.00013	0.00013	0.0000058
51	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.00011	0.00018	0.00015	0.000038
51	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	1	0.000020	0.00017	0.000063	0.000092
51	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00014	0.00023	0.00019	0.000047
51	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	1	0.000020	0.000050	0.000025	0.000015
51	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	2	0.000050	0.000060	0.000048	0.000020
51	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000030	0.000060	0.000047	0.000015
51	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	2	0.000050	0.000070	0.000052	0.000024
51	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	1	0.000020	0.000060	0.000027	0.000029
51	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	2	0.000050	0.000080	0.000062	0.000032
51	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	2	0.000020	0.00013	0.000067	0.000060
51	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	1	0.000020	0.000080	0.000038	0.000037
51	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000030	0.000050	0.000035	0.000018
51	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000080	0.000090	0.000072	0.000024
51	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	2	0.000030	0.000080	0.000042	0.000034
51	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	2	0.000070	0.000090	0.000065	0.000018
51	Dioxin/furans	OCDF	FS	3	1	0.000030	0.00021	0.000087	0.000011
51	Dioxin/furans	OCDF	WB	3	2	0.00014	0.00023	0.00015	0.000078
51	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	920	1,000	480	18
51	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	910	1,000	480	22
51	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	920	1,000	480	18
51	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	910	1,000	480	22
51	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	920	1,000	480	18
51	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	910	1,000	480	22
51	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	920	1,000	480	18
51	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	910	1,000	480	22
51	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	920	1,000	480	18
51	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	910	1,000	480	22
51	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	370	400	190	7.3
51	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	360	400	190	8.8
51	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	920	1,000	480	18
51	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	910	1,000	480	22
51	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	370	400	190	7.3
51	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	360	400	190	8.8
51	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	370	400	190	7.3
51	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	360	400	190	8.8
51	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	370	400	190	7.3
51	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	360	400	190	8.8
51	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	370	400	190	7.3
51	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	360	400	190	8.8
51	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	920	1,000	480	18

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
51	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	910	1,000	480	22
51	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	370	400	190	7.3
51	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	360	400	190	8.8
51	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	370	400	190	7.3
51	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	360	400	190	8.8
51	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	370	400	190	7.3
51	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	360	400	190	8.8
51	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	370	400	190	7.3
51	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	360	400	190	8.8
51	Guaiacols/Phenols	Phenol	FS	3	0	370	400	190	7.3
51	Guaiacols/Phenols	Phenol	WB	3	0	360	400	190	8.8
51	Metals	Aluminum	FS	3	2	1,000	2,500	1,400	1,000
51	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
51	Metals	Antimony	FS	3	0	50	50	25	0.00
51	Metals	Antimony	WB	3	0	50	50	25	0.00
51	Metals	Arsenic	FS	3	3	730	1,000	850	170
51	Metals	Arsenic	WB	3	3	730	880	810	78
51	Metals	Barium	FS	3	0	200	200	100	0.00
51	Metals	Barium	WB	3	0	200	200	100	0.00
51	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
51	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
51	Metals	Cadmium	FS	3	3	8.6	11	10	1.4
51	Metals	Cadmium	WB	3	3	150	170	160	12
51	Metals	Chromium	FS	3	0	100	100	50	0.00
51	Metals	Chromium	WB	3	3	100	140	120	21
51	Metals	Cobalt	FS	3	0	1.0	1.0	0.50	0.00
51	Metals	Cobalt	WB	3	3	59	97	83	21
51	Metals	Copper	FS	3	3	720	820	780	50
51	Metals	Copper	WB	3	3	1,400	1,600	1,400	100
51	Metals	Lead	FS	3	0	10	10	5.0	0.00
51	Metals	Lead	WB	3	3	12	23	18	5.5
51	Metals	Manganese	FS	3	3	81	110	91	15
51	Metals	Manganese	WB	3	3	370	390	390	11
51	Metals	Mercury	FS	3	1	110	230	110	97
51	Metals	Mercury	WB	3	0	89	110	50	4.5
51	Metals	Nickel	FS	3	3	32	53	42	11
51	Metals	Nickel	WB	3	3	31	53	39	12
51	Metals	Selenium	FS	3	3	320	320	320	0.00
51	Metals	Selenium	WB	3	3	480	590	530	60
51	Metals	Silver	FS	3	0	100	100	50	0.00
51	Metals	Silver	WB	3	0	100	100	50	0.00
51	Metals	Thallium	FS	3	0	50	50	25	0.00
51	Metals	Thallium	WB	3	0	50	50	25	0.00
51	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
51	Metals	Vanadium	WB	3	2	10	13	10	4.4
51	Metals	Zinc	FS	3	3	5,900	6,600	6,400	380
51	Metals	Zinc	WB	3	3	25,000	27,000	27,000	1,100
51	PCB	Aroclor 1016	FS	3	0	17	19	9.2	0.58
51	PCB	Aroclor 1016	WB	3	0	18	19	9.3	0.29
51	PCB	Aroclor 1221	FS	3	0	17	19	9.2	0.58
51	PCB	Aroclor 1221	WB	3	0	18	19	9.3	0.29
51	PCB	Aroclor 1232	FS	3	0	17	19	9.2	0.58
51	PCB	Aroclor 1232	WB	3	0	18	19	9.3	0.29
51	PCB	Aroclor 1242	FS	3	0	17	19	9.2	0.58
51	PCB	Aroclor 1242	WB	3	0	18	19	9.3	0.29
51	PCB	Aroclor 1248	FS	3	0	17	19	9.2	0.58
51	PCB	Aroclor 1248	WB	3	0	18	19	9.3	0.29
51	PCB	Aroclor 1254	FS	3	3	13	17	15	2.1
51	PCB	Aroclor 1254	WB	3	3	17	19	18	1.2
51	PCB	Aroclor 1260	FS	3	0	17	19	9.2	0.58
51	PCB	Aroclor 1260	WB	3	0	18	19	9.3	0.29
51	PCB	PCB 077	FS	3	3	0.011	0.013	0.012	0.0012
51	PCB	PCB 077	WB	3	3	0.014	0.017	0.016	0.0017
51	PCB	PCB 105	FS	3	3	0.19	0.23	0.21	0.021
51	PCB	PCB 105	WB	3	3	0.24	0.28	0.26	0.019
51	PCB	PCB 114	FS	3	3	0.018	0.022	0.020	0.0019
51	PCB	PCB 114	WB	3	3	0.022	0.022	0.022	0.00036
51	PCB	PCB 118	FS	3	3	0.44	0.54	0.50	0.050
51	PCB	PCB 118	WB	3	3	0.55	0.63	0.59	0.040
51	PCB	PCB 123	FS	3	3	0.0084	0.012	0.0097	0.0020
51	PCB	PCB 123	WB	3	3	0.0072	0.013	0.011	0.0030
51	PCB	PCB 126	FS	3	2	0.00081	0.0046	0.0025	0.0021
51	PCB	PCB 126	WB	3	2	0.00052	0.0036	0.0024	0.0019
51	PCB	PCB 156	FS	3	3	0.035	0.044	0.039	0.0041
51	PCB	PCB 156	WB	3	3	0.042	0.051	0.047	0.0044
51	PCB	PCB 157	FS	3	3	0.0099	0.012	0.011	0.00094

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
51	PCB	PCB 157	WB	3	3	0.0100	0.014	0.012	0.0019
51	PCB	PCB 167	FS	3	3	0.025	0.030	0.028	0.0026
51	PCB	PCB 167	WB	3	3	0.028	0.033	0.030	0.0029
51	PCB	PCB 169	FS	3	0	0.0010	0.0012	0.00055	0.000043
51	PCB	PCB 169	WB	3	0	0.0010	0.0011	0.00052	0.000032
51	PCB	PCB 170	FS	3	3	0.066	0.078	0.072	0.0061
51	PCB	PCB 170	WB	3	3	0.071	0.085	0.077	0.0073
51	PCB	PCB 180	FS	3	3	0.22	0.27	0.25	0.023
51	PCB	PCB 180	WB	3	3	0.24	0.28	0.26	0.021
51	PCB	PCB 189	FS	3	2	0.0010	0.0036	0.0022	0.0016
51	PCB	PCB 189	WB	3	3	0.0026	0.0033	0.0029	0.00034
51	Pesticides	Aldrin	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	Aldrin	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	Alpha-BHC	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	Alpha-BHC	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	Alpha-Chlordene	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	Alpha-Chlordene	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	Beta-BHC	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	Beta-BHC	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	cis-Nonachlor	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	cis-Nonachlor	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	DDD-o,p'	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	DDD-o,p'	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	DDE-o,p'	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	DDE-o,p'	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	DDT-o,p'	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	DDT-o,p'	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	DDD-p,p'	FS	3	3	1.5	3.9	3.0	1.3
51	Pesticides	DDD-p,p'	WB	3	2	1.8	5.5	2.8	2.4
51	Pesticides	DDE-p,p'	FS	3	3	11	15	13	2.1
51	Pesticides	DDE-p,p'	WB	3	3	15	18	17	1.5
51	Pesticides	DDT-p,p'	FS	3	3	4.8	5.3	5.0	0.29
51	Pesticides	DDT-p,p'	WB	3	3	4.2	6.2	5.1	1.0
51	Pesticides	DDMU	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	DDMU	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	Delta-BHC	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	Delta-BHC	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	Endosulfan Sulfate	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	Endosulfan Sulfate	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	Gamma-Chlordane	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	Gamma-Chlordane	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	gamma-Chlordene	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	gamma-Chlordene	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	Heptachlor	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	Heptachlor	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	Heptachlor Epoxide	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	Heptachlor Epoxide	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	Hexachlorobenzene	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	Hexachlorobenzene	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	Lindane	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	Lindane	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	Mirex	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	Mirex	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	Oxychlordane	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	Oxychlordane	WB	3	0	1.8	1.9	0.93	0.029
51	Pesticides	Pentachloroanisol	FS	3	0	1.7	1.9	0.92	0.058
51	Pesticides	Pentachloroanisol	WB	3	1	0.94	1.9	0.93	0.026
51	Pesticides	Toxaphene	FS	3	0	51	58	28	1.9
51	Pesticides	Toxaphene	WB	3	0	55	56	28	0.29
51	Pesticides	trans-Nonachlor	FS	3	3	2.4	2.9	2.7	0.26
51	Pesticides	trans-Nonachlor	WB	3	3	3.4	3.9	3.6	0.26
51	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.2	10	4.8	0.20
51	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.2	10	4.8	0.20
51	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	18	20	9.6	0.38
51	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	18	20	9.5	0.45
51	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	37	40	19	0.73
51	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	36	40	19	0.88
51	Semivolatiles	2-Chloronaphthalene	FS	3	0	18	20	9.6	0.38
51	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	20	9.5	0.45
51	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.2	10	4.8	0.20
51	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.2	10	4.8	0.20

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
51	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	Acenaphthene	FS	3	0	18	20	9.6	0.38
51	Semivolatiles	Acenaphthene	WB	3	1	18	24	14	8.1
51	Semivolatiles	Acenaphthylene	FS	3	0	9.2	10	4.8	0.20
51	Semivolatiles	Acenaphthylene	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	Anthracene	FS	3	0	9.2	10	4.8	0.20
51	Semivolatiles	Anthracene	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.2	10	4.8	0.20
51	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.2	10	4.8	0.20
51	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.2	10	4.8	0.20
51	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.2	10	4.8	0.20
51	Semivolatiles	Benzo(a)anthracene	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.2	9.7	4.7	0.14
51	Semivolatiles	Benzo(a)pyrene	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	18	19	9.3	0.28
51	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	20	9.5	0.45
51	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	9.2	9.7	4.7	0.14
51	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.2	9.7	4.7	0.14
51	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	18	20	9.6	0.38
51	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	20	9.5	0.45
51	Semivolatiles	Chrysene	FS	3	0	9.2	10	4.8	0.20
51	Semivolatiles	Chrysene	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	18	19	9.3	0.28
51	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	20	9.5	0.45
51	Semivolatiles	Dibenzofuran	FS	3	0	9.2	10	4.8	0.20
51	Semivolatiles	Dibenzofuran	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	Fluoranthene	FS	3	0	18	20	9.6	0.38
51	Semivolatiles	Fluoranthene	WB	3	0	18	20	9.5	0.45
51	Semivolatiles	9H-Fluorene	FS	3	0	9.2	10	4.8	0.20
51	Semivolatiles	9H-Fluorene	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.2	10	4.8	0.20
51	Semivolatiles	Hexachlorobutadiene	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	Hexachloroethane	FS	3	0	9.2	10	4.8	0.20
51	Semivolatiles	Hexachloroethane	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	18	19	9.3	0.28
51	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	20	9.5	0.45
51	Semivolatiles	Naphthalene	FS	3	0	30	69	26	10
51	Semivolatiles	Naphthalene	WB	3	0	67	75	35	2.2
51	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.2	10	4.8	0.20
51	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	Naphthalene, 2-methyl-	FS	3	2	9.7	14	11	5.1
51	Semivolatiles	Naphthalene, 2-methyl-	WB	3	3	14	16	16	1.2
51	Semivolatiles	Nitrobenzene	FS	3	0	9.2	10	4.8	0.20
51	Semivolatiles	Nitrobenzene	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	n-Nitrosodiphenylamine	FS	3	0	0.00	0.00	na	na
51	Semivolatiles	n-Nitrosodiphenylamine	WB	3	0	0.00	0.00	na	na
51	Semivolatiles	Phenanthrene	FS	3	0	9.2	10	4.8	0.20
51	Semivolatiles	Phenanthrene	WB	3	0	9.1	10	4.8	0.23
51	Semivolatiles	Pyrene	FS	3	0	18	20	9.6	0.38
51	Semivolatiles	Pyrene	WB	3	0	18	20	9.5	0.45
51	Semivolatiles	Retene	FS	3	0	18	20	9.6	0.38
51	Semivolatiles	Retene	WB	3	0	18	20	9.5	0.45
56	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000020	0.000030	0.000017	0.000012
56	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
56	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000010	0.000090	0.000035	0.000048
56	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.000080	0.00014	0.00012	0.000035
56	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000010	0.000010	0.0000050	0.00
56	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	2	0.000020	0.000030	0.000020	0.000010
56	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	1	0.000010	0.000090	0.000033	0.000049
56	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000010	0.00013	0.000065	0.000063
56	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000010	0.000060	0.000023	0.000032
56	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
56	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.00015	0.00019	0.00017	0.000021
56	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	2	0.000010	0.00020	0.00012	0.000100
56	Dioxin/furans	OCDD	FS	3	3	0.00042	0.00053	0.00048	0.000057
56	Dioxin/furans	OCDD	WB	3	3	0.00029	0.00069	0.00043	0.00022
56	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00044	0.00074	0.00056	0.00016
56	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00074	0.0011	0.00088	0.00016
56	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	2	0.000020	0.00010	0.000063	0.000047
56	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.000080	0.00012	0.000093	0.000023
56	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00012	0.00013	0.00013	0.0000058

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
56	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00015	0.00017	0.00016	0.000010
56	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
56	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	2	0.000020	0.000060	0.000033	0.000025
56	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000030	0.000040	0.000037	0.0000058
56	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	3	0.000020	0.000040	0.000030	0.000010
56	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
56	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	1	0.000010	0.000020	0.000010	0.00
56	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	2	0.000010	0.000050	0.000032	0.000024
56	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	2	0.000020	0.000050	0.000030	0.000020
56	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
56	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	3	0.000040	0.00011	0.000063	0.000040
56	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	2	0.000020	0.000020	0.000017	0.0000058
56	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
56	Dioxin/furans	OCDF	FS	3	2	0.000030	0.000090	0.000062	0.000041
56	Dioxin/furans	OCDF	WB	3	2	0.000010	0.00017	0.000072	0.000087
56	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	930	990	480	16
56	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	870	980	460	31
56	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	930	990	480	16
56	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	870	980	460	31
56	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	930	990	480	16
56	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	870	980	460	31
56	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	930	990	480	16
56	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	870	980	460	31
56	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	930	990	480	16
56	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	870	980	460	31
56	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	370	400	190	6.5
56	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	350	390	180	12
56	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	930	990	480	16
56	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	870	980	460	31
56	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	370	400	190	6.5
56	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	350	390	180	12
56	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	370	400	190	6.5
56	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	350	390	180	12
56	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	370	400	190	6.5
56	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	350	390	180	12
56	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	370	400	190	6.5
56	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	350	390	180	12
56	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	930	990	480	16
56	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	870	980	460	31
56	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	370	400	190	6.5
56	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	350	390	180	12
56	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	370	400	190	6.5
56	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	350	390	180	12
56	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	370	400	190	6.5
56	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	350	390	180	12
56	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	370	400	190	6.5
56	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	350	390	180	12
56	Guaiacols/Phenols	Phenol	FS	3	0	370	400	190	6.5
56	Guaiacols/Phenols	Phenol	WB	3	0	350	390	190	9.8
56	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
56	Metals	Aluminum	WB	3	1	1,000	1,400	800	520
56	Metals	Antimony	FS	3	0	50	50	25	0.00
56	Metals	Antimony	WB	3	0	50	50	25	0.00
56	Metals	Arsenic	FS	3	3	560	1,000	790	230
56	Metals	Arsenic	WB	3	3	570	610	590	25
56	Metals	Barium	FS	3	0	200	200	100	0.00
56	Metals	Barium	WB	3	0	200	200	100	0.00
56	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
56	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
56	Metals	Cadmium	FS	3	3	9.3	11	10	0.86
56	Metals	Cadmium	WB	3	3	82	130	100	25
56	Metals	Chromium	FS	3	3	140	250	180	59
56	Metals	Chromium	WB	3	3	160	190	170	17
56	Metals	Cobalt	FS	3	3	120	190	150	35
56	Metals	Cobalt	WB	3	3	130	180	150	27
56	Metals	Copper	FS	3	3	710	2,100	1,300	700
56	Metals	Copper	WB	3	3	1,800	2,300	2,100	240
56	Metals	Lead	FS	3	2	10	140	67	69
56	Metals	Lead	WB	3	3	74	92	85	9.9
56	Metals	Manganese	FS	3	3	99	120	110	10
56	Metals	Manganese	WB	3	3	320	420	360	51
56	Metals	Mercury	FS	3	3	150	510	310	190
56	Metals	Mercury	WB	3	3	89	110	95	9.3
56	Metals	Nickel	FS	3	3	260	370	330	59
56	Metals	Nickel	WB	3	3	380	630	530	130
56	Metals	Selenium	FS	3	3	300	310	310	5.8

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
56	Metals	Selenium	WB	3	3	500	610	560	58
56	Metals	Silver	FS	3	0	100	100	50	0.00
56	Metals	Silver	WB	3	0	100	100	50	0.00
56	Metals	Thallium	FS	3	0	50	50	25	0.00
56	Metals	Thallium	WB	3	0	50	50	25	0.00
56	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
56	Metals	Vanadium	WB	3	3	26	37	33	5.9
56	Metals	Zinc	FS	3	3	5,700	6,700	6,300	560
56	Metals	Zinc	WB	3	3	25,000	34,000	30,000	4,700
56	PCB	Aroclor 1016	FS	3	0	19	20	9.8	0.29
56	PCB	Aroclor 1016	WB	3	0	20	20	10	0.00
56	PCB	Aroclor 1221	FS	3	0	19	20	9.8	0.29
56	PCB	Aroclor 1221	WB	3	0	20	20	10	0.00
56	PCB	Aroclor 1232	FS	3	0	19	20	9.8	0.29
56	PCB	Aroclor 1232	WB	3	0	20	20	10	0.00
56	PCB	Aroclor 1242	FS	3	0	19	20	9.8	0.29
56	PCB	Aroclor 1242	WB	3	0	20	20	10	0.00
56	PCB	Aroclor 1248	FS	3	0	19	20	9.8	0.29
56	PCB	Aroclor 1248	WB	3	0	20	20	10	0.00
56	PCB	Aroclor 1254	FS	3	3	12	21	16	4.5
56	PCB	Aroclor 1254	WB	3	3	13	26	19	6.5
56	PCB	Aroclor 1260	FS	3	0	19	20	9.8	0.29
56	PCB	Aroclor 1260	WB	3	0	20	20	10	0.00
56	PCB	PCB 077	FS	3	2	0.00076	0.010	0.0059	0.0050
56	PCB	PCB 077	WB	3	3	0.011	0.012	0.00072	0.00072
56	PCB	PCB 105	FS	3	3	0.15	0.26	0.19	0.060
56	PCB	PCB 105	WB	3	3	0.30	0.43	0.36	0.066
56	PCB	PCB 114	FS	3	3	0.013	0.024	0.017	0.0063
56	PCB	PCB 114	WB	3	3	0.030	0.041	0.034	0.0064
56	PCB	PCB 118	FS	3	3	0.31	0.56	0.41	0.13
56	PCB	PCB 118	WB	3	3	0.69	0.92	0.78	0.12
56	PCB	PCB 123	FS	3	3	0.0084	0.014	0.010	0.0033
56	PCB	PCB 123	WB	3	3	0.015	0.018	0.016	0.0015
56	PCB	PCB 126	FS	3	0	0.0017	0.0022	0.0010	0.00012
56	PCB	PCB 126	WB	3	2	0.0019	0.0047	0.0031	0.0019
56	PCB	PCB 156	FS	3	3	0.030	0.073	0.044	0.025
56	PCB	PCB 156	WB	3	3	0.069	0.089	0.077	0.010
56	PCB	PCB 157	FS	3	3	0.0076	0.019	0.012	0.0062
56	PCB	PCB 157	WB	3	3	0.017	0.029	0.022	0.0064
56	PCB	PCB 167	FS	3	3	0.019	0.034	0.025	0.0083
56	PCB	PCB 167	WB	3	3	0.038	0.048	0.042	0.0054
56	PCB	PCB 169	FS	3	0	0.0013	0.0026	0.0010	0.00033
56	PCB	PCB 169	WB	3	0	0.0011	0.0027	0.00090	0.00041
56	PCB	PCB 170	FS	3	3	0.055	0.17	0.099	0.061
56	PCB	PCB 170	WB	3	3	0.13	0.20	0.16	0.035
56	PCB	PCB 180	FS	3	3	0.18	0.53	0.31	0.19
56	PCB	PCB 180	WB	3	3	0.40	0.63	0.50	0.12
56	PCB	PCB 189	FS	3	1	0.0011	0.0057	0.0024	0.0029
56	PCB	PCB 189	WB	3	3	0.0047	0.0072	0.0057	0.0013
56	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Aldrin	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Alpha-BHC	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Alpha-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Alpha-Chlordane	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Beta-BHC	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	1	1.4	2.0	1.1	0.23
56	Pesticides	cis-Nonachlor	FS	3	1	1.1	2.0	1.0	0.058
56	Pesticides	cis-Nonachlor	WB	3	1	1.9	2.0	1.3	0.52
56	Pesticides	DDD-o,p'	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	DDD-o,p'	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	DDE-o,p'	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	DDE-o,p'	WB	3	1	1.4	2.0	1.1	0.23
56	Pesticides	DDT-o,p'	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	DDT-o,p'	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	DDD-p,p'	FS	3	2	1.4	2.0	1.4	0.35
56	Pesticides	DDD-p,p'	WB	3	2	2.0	3.9	2.7	1.5
56	Pesticides	DDE-p,p'	FS	3	3	6.2	18	11	6.3
56	Pesticides	DDE-p,p'	WB	3	3	16	22	20	3.2
56	Pesticides	DDT-p,p'	FS	3	2	2.0	4.1	2.7	1.6
56	Pesticides	DDT-p,p'	WB	3	3	3.3	5.4	4.4	1.1
56	Pesticides	DDMU	FS	3	1	1.9	2.4	1.5	0.82
56	Pesticides	DDMU	WB	3	1	1.6	2.0	1.2	0.35
56	Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.98	0.029

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
56	Pesticides	Delta-BHC	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	na	na
56	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	na	na
56	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Gamma-Chlordane	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	gamma-Chlordene	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	gamma-Chlordene	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Heptachlor	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Heptachlor Epoxide	FS	3	0	0.00	0.00	na	na
56	Pesticides	Heptachlor Epoxide	WB	3	0	0.00	0.00	na	na
56	Pesticides	Hexachlorobenzene	FS	3	3	1.2	2.1	1.6	0.45
56	Pesticides	Hexachlorobenzene	WB	3	3	2.0	2.4	2.1	0.23
56	Pesticides	Lindane	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Lindane	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Mirex	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Mirex	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Oxychlordane	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Oxychlordane	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Pentachloroanisol	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Pentachloroanisol	WB	3	0	2.0	2.0	1.0	0.00
56	Pesticides	Toxaphene	FS	3	0	57	60	30	0.87
56	Pesticides	Toxaphene	WB	3	0	59	60	30	0.29
56	Pesticides	trans-Nonachlor	FS	3	3	1.2	2.6	1.9	0.70
56	Pesticides	trans-Nonachlor	WB	3	2	2.0	3.2	2.1	1.1
56	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	17	20	9.1	0.60
56	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	37	40	19	0.65
56	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	35	39	18	1.2
56	Semivolatiles	2-Chloronaphthalene	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	2-Chloronaphthalene	WB	3	0	17	20	9.1	0.60
56	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	Acenaphthene	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	Acenaphthene	WB	3	0	17	20	9.1	0.60
56	Semivolatiles	Acenaphthylene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Acenaphthylene	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	Anthracene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Anthracene	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	17	20	9.1	0.60
56	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	17	20	9.1	0.60
56	Semivolatiles	Chrysene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Chrysene	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	17	20	9.1	0.60
56	Semivolatiles	Dibenzofuran	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Dibenzofuran	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	Fluoranthene	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	Fluoranthene	WB	3	0	17	20	9.1	0.60
56	Semivolatiles	9H-Fluorene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	9H-Fluorene	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	Hexachloroethane	FS	3	0	9.3	9.9	4.8	0.15

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
56	Semivolatiles	Hexachloroethane	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	17	20	9.1	0.60
56	Semivolatiles	Naphthalene	FS	3	0	28	33	16	1.6
56	Semivolatiles	Naphthalene	WB	3	0	17	27	11	2.5
56	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	Nitrobenzene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Nitrobenzene	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	n-Nitrosodiphenylamine	FS	3	0	0.00	0.00	na	na
56	Semivolatiles	n-Nitrosodiphenylamine	WB	3	0	0.00	0.00	na	na
56	Semivolatiles	Phenanthrene	FS	3	0	9.3	9.9	4.8	0.15
56	Semivolatiles	Phenanthrene	WB	3	0	8.7	9.8	4.6	0.30
56	Semivolatiles	Pyrene	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	Pyrene	WB	3	0	17	20	9.1	0.60
56	Semivolatiles	Retene	FS	3	0	19	20	9.6	0.30
56	Semivolatiles	Retene	WB	3	0	17	20	9.1	0.60
62	Dioxin/furans	2,3,7,8-TCDD	FS	3	0	0.000010	0.000020	0.0000083	0.0000029
62	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000010	0.000030	0.0000083	0.0000058
62	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000010	0.00011	0.000062	0.000053
62	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	1	0.000020	0.000080	0.000035	0.000039
62	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	2	0.000010	0.000030	0.000018	0.000013
62	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000010	0.000040	0.000013	0.0000076
62	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	2	0.000010	0.000080	0.000048	0.000039
62	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000030	0.000080	0.000055	0.000035
62	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000010	0.000040	0.000025	0.000018
62	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	1	0.000030	0.000060	0.000032	0.000025
62	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000020	0.000080	0.000053	0.000038
62	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	2	0.000060	0.00015	0.000093	0.000060
62	Dioxin/furans	OCDD	FS	3	1	0.000020	0.00010	0.000040	0.000052
62	Dioxin/furans	OCDD	WB	3	3	0.00025	0.00030	0.00027	0.000025
62	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00053	0.00061	0.00058	0.000044
62	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00059	0.00069	0.00063	0.000051
62	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.00012	0.00014	0.00013	0.000012
62	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	1	0.000040	0.00011	0.000052	0.000051
62	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00015	0.00017	0.00016	0.000010
62	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	2	0.000050	0.00015	0.00011	0.000069
62	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	1	0.000010	0.000030	0.000015	0.000013
62	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	1	0.000030	0.000060	0.000028	0.0000029
62	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000030	0.000040	0.000033	0.0000058
62	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	1	0.000030	0.000060	0.000028	0.0000029
62	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000020	0.0000083	0.0000029
62	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	2	0.000020	0.000060	0.000033	0.000015
62	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	1	0.000020	0.000040	0.000020	0.000017
62	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	1	0.000030	0.000060	0.000028	0.0000029
62	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000010	0.000020	0.000015	0.0000087
62	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	1	0.000030	0.000040	0.000025	0.000013
62	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000020	0.0000083	0.0000029
62	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000040	0.000013	0.0000076
62	Dioxin/furans	OCDF	FS	3	0	0.000030	0.000040	0.000017	0.0000029
62	Dioxin/furans	OCDF	WB	3	1	0.000030	0.000070	0.000032	0.0000029
62	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	980	990	490	2.2
62	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	930	960	470	6.8
62	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	980	990	490	2.2
62	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	930	960	470	6.8
62	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	980	990	490	2.2
62	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	930	960	470	6.8
62	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	980	990	490	2.2
62	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	930	960	470	6.8
62	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	980	990	490	2.2
62	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	930	960	470	6.8
62	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	390	390	200	0.87
62	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	370	380	190	2.8
62	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	980	990	490	2.2
62	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	930	960	470	6.8
62	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	390	390	200	0.87
62	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	370	380	190	2.8
62	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	390	390	200	0.87
62	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	370	380	190	2.8
62	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	390	390	200	0.87
62	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	370	380	190	2.8
62	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	390	390	200	0.87
62	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	370	380	190	2.8
62	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	980	990	490	2.2

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
62	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	930	960	470	6.8
62	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	390	390	200	0.87
62	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	370	380	190	2.8
62	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	390	390	200	0.87
62	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	370	380	190	2.8
62	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	390	390	200	0.87
62	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	370	380	190	2.8
62	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	390	390	200	0.87
62	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	370	380	190	2.8
62	Guaiacols/Phenols	Phenol	FS	3	0	390	390	200	0.87
62	Guaiacols/Phenols	Phenol	WB	3	0	370	380	190	2.8
62	Metals	Aluminum	FS	3	1	1,000	1,300	760	460
62	Metals	Aluminum	WB	3	2	1,000	1,700	1,100	600
62	Metals	Antimony	FS	3	0	50	50	25	0.00
62	Metals	Antimony	WB	3	0	50	50	25	0.00
62	Metals	Arsenic	FS	3	3	760	1,200	940	200
62	Metals	Arsenic	WB	3	3	860	870	860	5.2
62	Metals	Barium	FS	3	0	200	200	100	0.00
62	Metals	Barium	WB	3	0	200	200	100	0.00
62	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
62	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
62	Metals	Cadmium	FS	3	3	11	13	12	1.2
62	Metals	Cadmium	WB	3	3	130	150	140	7.8
62	Metals	Chromium	FS	3	2	100	480	330	240
62	Metals	Chromium	WB	3	3	470	500	490	15
62	Metals	Cobalt	FS	3	3	3.3	4.8	3.8	0.84
62	Metals	Cobalt	WB	3	3	95	130	120	20
62	Metals	Copper	FS	3	3	650	680	660	17
62	Metals	Copper	WB	3	3	1,300	1,500	1,500	100
62	Metals	Lead	FS	3	0	10	10	5.0	0.00
62	Metals	Lead	WB	3	0	10	10	5.0	0.00
62	Metals	Manganese	FS	3	3	75	91	85	8.7
62	Metals	Manganese	WB	3	3	320	390	350	31
62	Metals	Mercury	FS	3	0	98	120	57	7.1
62	Metals	Mercury	WB	3	0	98	110	54	4.4
62	Metals	Nickel	FS	3	0	30	30	15	0.00
62	Metals	Nickel	WB	3	3	340	750	530	210
62	Metals	Selenium	FS	3	3	330	360	350	15
62	Metals	Selenium	WB	3	3	520	650	580	66
62	Metals	Silver	FS	3	0	100	100	50	0.00
62	Metals	Silver	WB	3	0	100	100	50	0.00
62	Metals	Thallium	FS	3	0	50	50	25	0.00
62	Metals	Thallium	WB	3	0	50	50	25	0.00
62	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
62	Metals	Vanadium	WB	3	3	11	23	15	6.9
62	Metals	Zinc	FS	3	3	6,200	6,500	6,300	170
62	Metals	Zinc	WB	3	3	20,000	20,000	20,000	100
62	PCB	Aroclor 1016	FS	3	0	18	20	9.7	0.58
62	PCB	Aroclor 1016	WB	3	0	19	20	9.7	0.29
62	PCB	Aroclor 1221	FS	3	0	18	20	9.7	0.58
62	PCB	Aroclor 1221	WB	3	0	19	20	9.7	0.29
62	PCB	Aroclor 1232	FS	3	0	18	20	9.7	0.58
62	PCB	Aroclor 1232	WB	3	0	19	20	9.7	0.29
62	PCB	Aroclor 1242	FS	3	0	18	20	9.7	0.58
62	PCB	Aroclor 1242	WB	3	0	19	20	9.7	0.29
62	PCB	Aroclor 1248	FS	3	0	18	20	9.7	0.58
62	PCB	Aroclor 1248	WB	3	0	19	20	9.7	0.29
62	PCB	Aroclor 1254	FS	3	3	15	19	17	2.1
62	PCB	Aroclor 1254	WB	3	3	17	18	18	0.58
62	PCB	Aroclor 1260	FS	3	0	18	20	9.7	0.58
62	PCB	Aroclor 1260	WB	3	0	19	20	9.7	0.29
62	PCB	PCB 077	FS	3	3	0.0099	0.013	0.011	0.0019
62	PCB	PCB 077	WB	3	3	0.011	0.013	0.012	0.00096
62	PCB	PCB 105	FS	3	3	0.20	0.26	0.23	0.030
62	PCB	PCB 105	WB	3	3	0.23	0.26	0.24	0.012
62	PCB	PCB 114	FS	3	3	0.020	0.026	0.022	0.0029
62	PCB	PCB 114	WB	3	3	0.021	0.022	0.021	0.00035
62	PCB	PCB 118	FS	3	3	0.48	0.59	0.53	0.057
62	PCB	PCB 118	WB	3	3	0.53	0.56	0.55	0.013
62	PCB	PCB 123	FS	3	3	0.011	0.012	0.012	0.00067
62	PCB	PCB 123	WB	3	3	0.0078	0.013	0.011	0.0026
62	PCB	PCB 126	FS	3	3	0.00085	0.0034	0.0024	0.0014
62	PCB	PCB 126	WB	3	2	0.00064	0.0034	0.0023	0.0017
62	PCB	PCB 156	FS	3	3	0.032	0.047	0.039	0.0072
62	PCB	PCB 156	WB	3	3	0.042	0.046	0.044	0.0020
62	PCB	PCB 157	FS	3	3	0.011	0.015	0.013	0.0024

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
62	PCB	PCB 157	WB	3	3	0.012	0.016	0.013	0.0025
62	PCB	PCB 167	FS	3	3	0.027	0.028	0.028	0.00079
62	PCB	PCB 167	WB	3	3	0.028	0.031	0.029	0.0019
62	PCB	PCB 169	FS	3	0	0.0011	0.0016	0.00066	0.00012
62	PCB	PCB 169	WB	3	0	0.0011	0.0015	0.00063	0.00012
62	PCB	PCB 170	FS	3	3	0.058	0.080	0.069	0.011
62	PCB	PCB 170	WB	3	3	0.066	0.074	0.070	0.0041
62	PCB	PCB 180	FS	3	3	0.21	0.27	0.24	0.031
62	PCB	PCB 180	WB	3	3	0.24	0.25	0.24	0.0083
62	PCB	PCB 189	FS	3	2	0.0010	0.0027	0.0019	0.0012
62	PCB	PCB 189	WB	3	1	0.0010	0.0029	0.0013	0.0014
62	Pesticides	Aldrin	FS	3	0	1.8	2.0	0.97	0.058
62	Pesticides	Aldrin	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	Alpha-BHC	FS	3	0	1.8	2.0	0.97	0.058
62	Pesticides	Alpha-BHC	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	Alpha-Chlordene	FS	3	0	1.8	2.0	0.97	0.058
62	Pesticides	Alpha-Chlordene	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	Beta-BHC	FS	3	0	1.8	2.0	0.97	0.058
62	Pesticides	Beta-BHC	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.8	2.0	0.97	0.058
62	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	cis-Nonachlor	FS	3	1	1.3	2.0	1.1	0.21
62	Pesticides	cis-Nonachlor	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	DDD-o,p'	FS	3	0	1.8	2.0	0.97	0.058
62	Pesticides	DDD-o,p'	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	DDE-o,p'	FS	3	1	1.4	2.0	1.1	0.26
62	Pesticides	DDE-o,p'	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	DDT-o,p'	FS	3	0	1.8	2.0	0.97	0.058
62	Pesticides	DDT-o,p'	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	DDD-p,p'	FS	3	3	1.5	3.0	2.2	0.76
62	Pesticides	DDD-p,p'	WB	3	3	2.1	3.4	2.6	0.68
62	Pesticides	DDE-p,p'	FS	3	3	8.8	13	11	2.2
62	Pesticides	DDE-p,p'	WB	3	3	13	15	14	1.0
62	Pesticides	DDT-p,p'	FS	3	3	4.0	5.3	4.6	0.66
62	Pesticides	DDT-p,p'	WB	3	3	4.2	6.7	5.4	1.3
62	Pesticides	DDMU	FS	3	1	1.4	2.0	1.1	0.26
62	Pesticides	DDMU	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	Delta-BHC	FS	3	0	1.8	2.0	0.97	0.058
62	Pesticides	Delta-BHC	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	Endosulfan Sulfate	FS	3	0	1.8	1.8	0.90	na
62	Pesticides	Endosulfan Sulfate	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	Gamma-Chlordane	FS	3	0	1.8	2.0	0.97	0.058
62	Pesticides	Gamma-Chlordane	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	gamma-Chlordene	FS	3	0	1.8	2.0	0.97	0.058
62	Pesticides	gamma-Chlordene	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	Heptachlor	FS	3	0	1.8	2.0	0.97	0.058
62	Pesticides	Heptachlor	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	Heptachlor Epoxide	FS	3	0	1.8	1.8	0.90	na
62	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	Hexachlorobenzene	FS	3	2	1.8	3.0	2.2	1.2
62	Pesticides	Hexachlorobenzene	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	Lindane	FS	3	0	1.8	2.0	0.97	0.058
62	Pesticides	Lindane	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	Mirex	FS	3	0	1.8	2.0	0.97	0.058
62	Pesticides	Mirex	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	Oxychlordane	FS	3	0	1.8	2.0	0.97	0.058
62	Pesticides	Oxychlordane	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	Pentachloroanisol	FS	3	0	1.8	2.0	0.97	0.058
62	Pesticides	Pentachloroanisol	WB	3	0	1.9	2.0	0.97	0.029
62	Pesticides	Toxaphene	FS	3	0	55	60	29	1.3
62	Pesticides	Toxaphene	WB	3	0	57	59	29	0.50
62	Pesticides	trans-Nonachlor	FS	3	3	2.4	2.9	2.7	0.26
62	Pesticides	trans-Nonachlor	WB	3	3	3.1	3.3	3.2	0.10
62	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.8	9.9	4.9	0.029
62	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	9.3	9.6	4.7	0.076
62	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.8	9.9	4.9	0.029
62	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	9.3	9.6	4.7	0.076
62	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	20	20	9.8	0.029
62	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	19	19	9.5	0.15
62	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	39	39	20	0.087
62	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	37	38	19	0.28
62	Semivolatiles	2-Chloronaphthalene	FS	3	0	20	20	9.8	0.029
62	Semivolatiles	2-Chloronaphthalene	WB	3	0	19	19	9.5	0.15
62	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.8	9.9	4.9	0.029
62	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	9.3	9.6	4.7	0.076
62	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.8	9.9	4.9	0.029

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
62	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	9.3	9.6	4.7	0.076
62	Semivolatiles	Acenaphthene	FS	3	0	20	20	9.8	0.029
62	Semivolatiles	Acenaphthene	WB	3	0	19	19	9.5	0.15
62	Semivolatiles	Acenaphthylene	FS	3	0	9.8	9.9	4.9	0.029
62	Semivolatiles	Acenaphthylene	WB	3	0	9.3	9.6	4.7	0.076
62	Semivolatiles	Anthracene	FS	3	0	9.8	9.9	4.9	0.029
62	Semivolatiles	Anthracene	WB	3	0	9.3	9.6	4.7	0.076
62	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.8	9.9	4.9	0.029
62	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	9.3	9.6	4.7	0.076
62	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.8	9.9	4.9	0.029
62	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	9.3	9.6	4.7	0.076
62	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.8	9.9	4.9	0.029
62	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	9.3	9.6	4.7	0.076
62	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.5	9.9	4.9	0.10
62	Semivolatiles	Benzo(a)anthracene	WB	3	0	9.6	9.7	4.8	0.029
62	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.5	9.9	4.9	0.10
62	Semivolatiles	Benzo(a)pyrene	WB	3	0	9.6	9.7	4.8	0.029
62	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	19	20	9.7	0.20
62	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	19	19	9.6	0.058
62	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	9.5	9.9	4.9	0.10
62	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	9.6	9.7	4.8	0.029
62	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.5	9.9	4.9	0.10
62	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	9.6	9.7	4.8	0.029
62	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	20	20	9.8	0.029
62	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	19	19	9.5	0.15
62	Semivolatiles	Chrysene	FS	3	0	9.5	9.9	4.9	0.10
62	Semivolatiles	Chrysene	WB	3	0	9.6	9.7	4.8	0.029
62	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	19	20	9.7	0.20
62	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	19	19	9.6	0.058
62	Semivolatiles	Dibenzofuran	FS	3	0	9.8	9.9	4.9	0.029
62	Semivolatiles	Dibenzofuran	WB	3	0	9.3	9.6	4.7	0.076
62	Semivolatiles	Fluoranthene	FS	3	0	20	20	9.8	0.029
62	Semivolatiles	Fluoranthene	WB	3	0	19	19	9.5	0.15
62	Semivolatiles	9H-Fluorene	FS	3	0	9.8	9.9	4.9	0.029
62	Semivolatiles	9H-Fluorene	WB	3	0	9.3	9.6	4.7	0.076
62	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.8	9.9	4.9	0.029
62	Semivolatiles	Hexachlorobutadiene	WB	3	0	9.3	9.6	4.7	0.076
62	Semivolatiles	Hexachloroethane	FS	3	0	9.8	9.9	4.9	0.029
62	Semivolatiles	Hexachloroethane	WB	3	0	9.3	9.6	4.7	0.076
62	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	19	20	9.7	0.20
62	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	19	19	9.6	0.058
62	Semivolatiles	Naphthalene	FS	3	0	20	40	16	5.2
62	Semivolatiles	Naphthalene	WB	3	0	37	55	24	5.1
62	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.8	9.9	4.9	0.029
62	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	9.3	9.6	4.7	0.076
62	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.8	11	5.1	0.40
62	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	9.3	9.6	4.7	0.076
62	Semivolatiles	Nitrobenzene	FS	3	0	9.8	9.9	4.9	0.029
62	Semivolatiles	Nitrobenzene	WB	3	0	9.3	9.6	4.7	0.076
62	Semivolatiles	n-Nitrosodiphenylamine	FS	3	0	0.00	0.00	na	na
62	Semivolatiles	n-Nitrosodiphenylamine	WB	3	0	0.00	0.00	na	na
62	Semivolatiles	Phenanthrene	FS	3	0	9.8	9.9	4.9	0.029
62	Semivolatiles	Phenanthrene	WB	3	0	9.3	9.6	4.7	0.076
62	Semivolatiles	Pyrene	FS	3	0	19	20	9.7	0.20
62	Semivolatiles	Pyrene	WB	3	0	19	19	9.6	0.058
62	Semivolatiles	Retene	FS	3	0	19	20	9.7	0.20
62	Semivolatiles	Retene	WB	3	0	19	19	9.6	0.058
63	Dioxin/furans	2,3,7,8-TCDD	FS	3	0	0.000010	0.000030	0.000010	0.0000050
63	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
63	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000010	0.000080	0.000033	0.000041
63	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.000010	0.000010	0.0000050	0.00
63	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	2	0.000020	0.000060	0.000030	0.000026
63	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	1	0.000010	0.000020	0.000010	0.0000087
63	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.000070	0.00012	0.000097	0.000025
63	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	1	0.000010	0.000060	0.000023	0.000032
63	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000020	0.000040	0.000023	0.000015
63	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000010	0.000040	0.000025	0.000018
63	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	1	0.000020	0.000070	0.000037	0.000031
63	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.000080	0.00012	0.00010	0.000020
63	Dioxin/furans	OCDD	FS	3	3	0.000025	0.00041	0.00034	0.000083
63	Dioxin/furans	OCDD	WB	3	3	0.000021	0.00030	0.00025	0.000045
63	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.000057	0.00068	0.00061	0.000059
63	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.000059	0.00073	0.00068	0.000076
63	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.000010	0.00014	0.00012	0.000021
63	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	2	0.000010	0.00013	0.000088	0.000072
63	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00015	0.00018	0.00017	0.000015

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
63	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00016	0.00018	0.00017	0.000010
63	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000010	0.000060	0.000013	0.000014
63	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	1	0.000010	0.000030	0.000013	0.000014
63	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	1	0.000010	0.000060	0.000022	0.000014
63	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	2	0.000010	0.000030	0.000022	0.000014
63	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000060	0.000013	0.000014
63	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
63	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	1	0.000010	0.000060	0.000025	0.000018
63	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	1	0.000010	0.000030	0.000013	0.000014
63	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	1	0.000020	0.000070	0.000025	0.0000087
63	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	1	0.000010	0.000030	0.000015	0.000013
63	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000070	0.000020	0.000015
63	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
63	Dioxin/furans	OCDF	FS	3	0	0.000010	0.00017	0.000042	0.000040
63	Dioxin/furans	OCDF	WB	3	1	0.000010	0.000030	0.000013	0.0000076
63	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	780	970	450	51
63	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	940	970	480	7.5
63	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	780	970	450	51
63	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	940	970	480	7.5
63	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	780	970	450	51
63	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	940	970	480	7.5
63	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	780	970	450	51
63	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	940	970	480	7.5
63	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	780	970	450	51
63	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	940	970	480	7.5
63	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	310	390	180	20
63	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	380	390	190	3.0
63	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	780	970	450	51
63	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	940	970	480	7.5
63	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	310	390	180	20
63	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	380	390	190	3.0
63	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	310	390	180	20
63	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	380	390	190	3.0
63	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	310	390	180	20
63	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	380	390	190	3.0
63	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	310	390	180	20
63	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	380	390	190	3.0
63	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	780	970	450	51
63	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	940	970	480	7.5
63	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	310	390	180	20
63	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	380	390	190	3.0
63	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	310	390	180	20
63	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	380	390	190	3.0
63	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	310	390	180	20
63	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	380	390	190	3.0
63	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	310	390	180	20
63	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	380	390	190	3.0
63	Guaiacols/Phenols	Phenol	FS	3	0	310	390	180	20
63	Guaiacols/Phenols	Phenol	WB	3	0	380	390	190	3.0
63	Metals	Aluminum	FS	3	1	1,000	1,200	720	390
63	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
63	Metals	Antimony	FS	3	0	50	50	25	0.00
63	Metals	Antimony	WB	3	0	50	50	25	0.00
63	Metals	Arsenic	FS	3	3	850	920	900	36
63	Metals	Arsenic	WB	3	3	640	880	790	130
63	Metals	Barium	FS	3	0	200	200	100	0.00
63	Metals	Barium	WB	3	0	200	200	100	0.00
63	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
63	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
63	Metals	Cadmium	FS	3	3	7.8	11	9.6	1.6
63	Metals	Cadmium	WB	3	3	120	150	130	16
63	Metals	Chromium	FS	3	2	100	490	330	240
63	Metals	Chromium	WB	3	2	100	150	100	50
63	Metals	Cobalt	FS	3	2	1.0	5.0	3.3	2.4
63	Metals	Cobalt	WB	3	3	42	120	77	37
63	Metals	Copper	FS	3	3	680	710	700	20
63	Metals	Copper	WB	3	3	1,200	1,400	1,300	100
63	Metals	Lead	FS	3	0	10	10	5.0	0.00
63	Metals	Lead	WB	3	3	11	13	12	1.0
63	Metals	Manganese	FS	3	3	80	92	87	6.1
63	Metals	Manganese	WB	3	3	330	390	370	40
63	Metals	Mercury	FS	3	1	83	150	81	56
63	Metals	Mercury	WB	3	0	97	110	52	3.5
63	Metals	Nickel	FS	3	1	30	47	26	18
63	Metals	Nickel	WB	3	3	34	45	39	5.6
63	Metals	Selenium	FS	3	3	340	350	350	5.8

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
63	Metals	Selenium	WB	3	3	510	580	550	41
63	Metals	Silver	FS	3	0	100	100	50	0.00
63	Metals	Silver	WB	3	0	100	100	50	0.00
63	Metals	Thallium	FS	3	0	50	50	25	0.00
63	Metals	Thallium	WB	3	0	50	50	25	0.00
63	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
63	Metals	Vanadium	WB	3	2	10	18	13	7.2
63	Metals	Zinc	FS	3	3	5,900	6,700	6,200	480
63	Metals	Zinc	WB	3	3	20,000	24,000	22,000	2,300
63	PCB	Aroclor 1016	FS	3	0	17	19	9.2	0.58
63	PCB	Aroclor 1016	WB	3	0	19	19	9.5	0.00
63	PCB	Aroclor 1221	FS	3	0	17	19	9.2	0.58
63	PCB	Aroclor 1221	WB	3	0	19	19	9.5	0.00
63	PCB	Aroclor 1232	FS	3	0	17	19	9.2	0.58
63	PCB	Aroclor 1232	WB	3	0	19	19	9.5	0.00
63	PCB	Aroclor 1242	FS	3	0	17	19	9.2	0.58
63	PCB	Aroclor 1242	WB	3	0	19	19	9.5	0.00
63	PCB	Aroclor 1248	FS	3	0	17	19	9.2	0.58
63	PCB	Aroclor 1248	WB	3	0	19	19	9.5	0.00
63	PCB	Aroclor 1254	FS	3	3	14	15	14	0.58
63	PCB	Aroclor 1254	WB	3	3	16	21	19	2.9
63	PCB	Aroclor 1260	FS	3	0	17	19	9.2	0.58
63	PCB	Aroclor 1260	WB	3	0	19	19	9.5	0.00
63	PCB	PCB 077	FS	3	3	0.010	0.011	0.011	0.00025
63	PCB	PCB 077	WB	3	3	0.013	0.014	0.013	0.00062
63	PCB	PCB 105	FS	3	3	0.19	0.22	0.20	0.015
63	PCB	PCB 105	WB	3	3	0.21	0.23	0.22	0.0076
63	PCB	PCB 114	FS	3	3	0.016	0.020	0.017	0.0023
63	PCB	PCB 114	WB	3	3	0.020	0.021	0.021	0.00071
63	PCB	PCB 118	FS	3	3	0.44	0.51	0.47	0.034
63	PCB	PCB 118	WB	3	3	0.49	0.53	0.51	0.018
63	PCB	PCB 123	FS	3	3	0.0061	0.012	0.0083	0.0030
63	PCB	PCB 123	WB	3	3	0.011	0.013	0.012	0.00087
63	PCB	PCB 126	FS	3	3	0.0027	0.0030	0.0028	0.00016
63	PCB	PCB 126	WB	3	2	0.00064	0.0042	0.0028	0.0021
63	PCB	PCB 156	FS	3	3	0.036	0.043	0.039	0.0039
63	PCB	PCB 156	WB	3	3	0.039	0.040	0.039	0.0010
63	PCB	PCB 157	FS	3	3	0.0098	0.011	0.010	0.00087
63	PCB	PCB 157	WB	3	3	0.0097	0.010	0.0099	0.00035
63	PCB	PCB 167	FS	3	3	0.026	0.028	0.027	0.0013
63	PCB	PCB 167	WB	3	3	0.026	0.027	0.027	0.00057
63	PCB	PCB 169	FS	3	0	0.0010	0.0012	0.00053	0.000046
63	PCB	PCB 169	WB	3	0	0.0010	0.0010	0.00050	0.00
63	PCB	PCB 170	FS	3	3	0.064	0.078	0.069	0.0074
63	PCB	PCB 170	WB	3	3	0.063	0.065	0.064	0.0011
63	PCB	PCB 180	FS	3	3	0.22	0.26	0.24	0.022
63	PCB	PCB 180	WB	3	3	0.21	0.22	0.21	0.0031
63	PCB	PCB 189	FS	3	3	0.0023	0.0028	0.0025	0.00025
63	PCB	PCB 189	WB	3	3	0.0023	0.0027	0.0025	0.00019
63	Pesticides	Aldrin	FS	3	0	1.7	1.9	0.92	0.058
63	Pesticides	Aldrin	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	Alpha-BHC	FS	3	0	1.7	1.9	0.92	0.058
63	Pesticides	Alpha-BHC	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	Alpha-Chlordane	FS	3	0	1.7	1.9	0.92	0.058
63	Pesticides	Alpha-Chlordane	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	Beta-BHC	FS	3	0	1.7	1.9	0.92	0.058
63	Pesticides	Beta-BHC	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.7	1.9	0.92	0.058
63	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	cis-Nonachlor	FS	3	0	1.7	1.9	0.92	0.058
63	Pesticides	cis-Nonachlor	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	DDD-o,p'	FS	3	0	1.7	1.9	0.92	0.058
63	Pesticides	DDD-o,p'	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	DDE-o,p'	FS	3	0	1.7	1.9	0.92	0.058
63	Pesticides	DDE-o,p'	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	DDT-o,p'	FS	3	0	1.7	1.9	0.92	0.058
63	Pesticides	DDT-o,p'	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	DDD-p,p'	FS	3	3	1.5	2.5	2.0	0.50
63	Pesticides	DDD-p,p'	WB	3	3	2.8	4.1	3.6	0.72
63	Pesticides	DDE-p,p'	FS	3	3	11	13	12	1.0
63	Pesticides	DDE-p,p'	WB	3	3	11	14	12	1.5
63	Pesticides	DDT-p,p'	FS	3	3	1.7	5.8	4.1	2.1
63	Pesticides	DDT-p,p'	WB	3	3	5.6	7.0	6.2	0.71
63	Pesticides	DDMU	FS	3	0	1.7	1.9	0.92	0.058
63	Pesticides	DDMU	WB	3	1	1.9	2.8	1.6	1.1
63	Pesticides	Delta-BHC	FS	3	0	1.7	1.9	0.92	0.058

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
63	Pesticides	Delta-BHC	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	Endosulfan Sulfate	FS	3	0	1.7	1.9	0.92	0.058
63	Pesticides	Endosulfan Sulfate	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	Gamma-Chlordane	FS	3	0	1.7	1.9	0.92	0.058
63	Pesticides	Gamma-Chlordane	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	gamma-Chlordene	FS	3	0	1.7	1.9	0.92	0.058
63	Pesticides	gamma-Chlordene	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	Heptachlor	FS	3	0	1.7	1.9	0.92	0.058
63	Pesticides	Heptachlor	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	Heptachlor Epoxide	FS	3	0	1.7	1.9	0.92	0.058
63	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	Hexachlorobenzene	FS	3	1	1.7	2.3	1.4	0.81
63	Pesticides	Hexachlorobenzene	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	Lindane	FS	3	0	1.7	1.9	0.92	0.058
63	Pesticides	Lindane	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	Mirex	FS	3	0	1.7	1.9	0.92	0.058
63	Pesticides	Mirex	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	Oxychlordane	FS	3	0	1.7	1.9	0.92	0.058
63	Pesticides	Oxychlordane	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	Pentachloroanisol	FS	3	0	1.7	1.9	0.92	0.058
63	Pesticides	Pentachloroanisol	WB	3	0	1.9	1.9	0.95	1.5E-08
63	Pesticides	Toxaphene	FS	3	0	51	58	28	2.0
63	Pesticides	Toxaphene	WB	3	0	56	58	29	0.58
63	Pesticides	trans-Nonachlor	FS	3	3	2.4	2.9	2.6	0.26
63	Pesticides	trans-Nonachlor	WB	3	3	3.1	4.9	3.9	0.92
63	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	7.8	9.7	4.5	0.49
63	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	7.8	9.7	4.5	0.49
63	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	16	19	8.9	1.0
63	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	19	19	9.6	0.15
63	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	31	39	18	2.0
63	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	38	39	19	0.30
63	Semivolatiles	2-Chloronaphthalene	FS	3	0	16	19	8.9	1.0
63	Semivolatiles	2-Chloronaphthalene	WB	3	0	19	19	9.6	0.15
63	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	7.8	9.7	4.5	0.49
63	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	7.8	9.7	4.5	0.49
63	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	Acenaphthene	FS	3	0	16	19	8.9	1.0
63	Semivolatiles	Acenaphthene	WB	3	0	19	19	9.6	0.15
63	Semivolatiles	Acenaphthylene	FS	3	0	7.8	9.7	4.5	0.49
63	Semivolatiles	Acenaphthylene	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	Anthracene	FS	3	0	7.8	9.7	4.5	0.49
63	Semivolatiles	Anthracene	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	7.8	9.7	4.5	0.49
63	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	7.8	9.7	4.5	0.49
63	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	7.8	9.7	4.5	0.49
63	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	Benzo(a)anthracene	FS	3	0	7.8	9.7	4.5	0.49
63	Semivolatiles	Benzo(a)anthracene	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.7	10	4.9	0.076
63	Semivolatiles	Benzo(a)pyrene	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	19	20	9.8	0.18
63	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	19	19	9.6	0.16
63	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	9.7	10	4.9	0.076
63	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.7	10	4.9	0.076
63	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	16	19	8.9	1.0
63	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	19	19	9.6	0.15
63	Semivolatiles	Chrysene	FS	3	0	7.8	9.7	4.5	0.49
63	Semivolatiles	Chrysene	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	19	20	9.8	0.18
63	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	19	19	9.6	0.16
63	Semivolatiles	Dibenzofuran	FS	3	0	7.8	9.7	4.5	0.49
63	Semivolatiles	Dibenzofuran	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	Fluoranthene	FS	3	0	16	19	8.9	1.0
63	Semivolatiles	Fluoranthene	WB	3	0	19	19	9.6	0.15
63	Semivolatiles	9H-Fluorene	FS	3	0	7.8	9.7	4.5	0.49
63	Semivolatiles	9H-Fluorene	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	Hexachlorobutadiene	FS	3	0	7.8	9.7	4.5	0.49
63	Semivolatiles	Hexachlorobutadiene	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	Hexachloroethane	FS	3	0	7.8	9.7	4.5	0.49

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
63	Semivolatiles	Hexachloroethane	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	19	20	9.8	0.18
63	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	19	19	9.6	0.16
63	Semivolatiles	Naphthalene	FS	3	0	26	67	26	11
63	Semivolatiles	Naphthalene	WB	3	0	43	66	28	6.2
63	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	7.8	9.7	4.5	0.49
63	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	Naphthalene, 2-methyl-	FS	3	1	7.8	11	6.5	3.9
63	Semivolatiles	Naphthalene, 2-methyl-	WB	3	2	9.6	10	8.3	3.0
63	Semivolatiles	Nitrobenzene	FS	3	0	7.8	9.7	4.5	0.49
63	Semivolatiles	Nitrobenzene	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	n-Nitrosodiphenylamine	FS	3	0	0.00	0.00	na	na
63	Semivolatiles	n-Nitrosodiphenylamine	WB	3	0	0.00	0.00	na	na
63	Semivolatiles	Phenanthrene	FS	3	0	7.8	9.7	4.5	0.49
63	Semivolatiles	Phenanthrene	WB	3	0	9.4	9.7	4.8	0.076
63	Semivolatiles	Pyrene	FS	3	0	16	19	8.9	1.0
63	Semivolatiles	Pyrene	WB	3	0	19	19	9.6	0.15
63	Semivolatiles	Retene	FS	3	0	16	19	8.9	1.0
63	Semivolatiles	Retene	WB	3	0	19	19	9.6	0.15
94	Dioxin/furans	2,3,7,8-TCDD	E	3	1	0.000010	0.000040	0.000022	0.000018
94	Dioxin/furans	2,3,7,8-TCDD	FS	3	0	0.000010	0.000020	0.0000083	0.0000029
94	Dioxin/furans	2,3,7,8-TCDD	WB	3	2	0.000010	0.000040	0.000028	0.000020
94	Dioxin/furans	1,2,3,7,8-PeCDD	E	3	1	0.000010	0.000060	0.000028	0.000023
94	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	3	0.000055	0.00012	0.000083	0.000035
94	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.000020	0.000020	0.000010	0.00
94	Dioxin/furans	1,2,3,4,7,8-HxCDD	E	3	1	0.000010	0.000060	0.000015	0.000013
94	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	3	0.000015	0.000030	0.000021	0.0000088
94	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
94	Dioxin/furans	1,2,3,6,7,8-HxCDD	E	3	1	0.000010	0.000060	0.000025	0.000018
94	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	2	0.000010	0.000075	0.000050	0.000039
94	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000010	0.000070	0.000045	0.000035
94	Dioxin/furans	1,2,3,7,8,9-HxCDD	E	3	1	0.000010	0.000060	0.000025	0.000018
94	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	3	0.000025	0.000040	0.000031	0.0000088
94	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000010	0.000050	0.000035	0.000026
94	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	E	3	2	0.000010	0.00011	0.000068	0.000056
94	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.000055	0.00011	0.000087	0.000032
94	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.000010	0.00017	0.00013	0.000038
94	Dioxin/furans	OCDD	E	3	3	0.00031	0.00057	0.00043	0.00013
94	Dioxin/furans	OCDD	FS	3	3	0.00014	0.00030	0.00020	0.000088
94	Dioxin/furans	OCDD	WB	3	1	0.000010	0.00029	0.00010	0.00016
94	Dioxin/furans	2,3,7,8-TCDF	E	3	3	0.00057	0.00065	0.00061	0.000040
94	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00064	0.00070	0.00067	0.000033
94	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00062	0.00080	0.00072	0.000093
94	Dioxin/furans	1,2,3,7,8-PeCDF	E	3	1	0.000020	0.000080	0.000037	0.000025
94	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.00012	0.00018	0.00015	0.000031
94	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	2	0.000010	0.00012	0.000078	0.000064
94	Dioxin/furans	2,3,4,7,8-PeCDF	E	3	1	0.000020	0.00010	0.000050	0.000046
94	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00015	0.00017	0.00016	0.000012
94	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00018	0.00021	0.00020	0.000017
94	Dioxin/furans	1,2,3,4,7,8-HxCDF	E	3	0	0.000010	0.00019	0.000037	0.000051
94	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	3	0.000030	0.000040	0.000033	0.0000058
94	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	2	0.000020	0.000040	0.000023	0.000015
94	Dioxin/furans	1,2,3,6,7,8-HxCDF	E	3	1	0.000020	0.00019	0.000042	0.000046
94	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000030	0.000050	0.000037	0.000012
94	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
94	Dioxin/furans	1,2,3,7,8,9-HxCDF	E	3	0	0.000010	0.00019	0.000037	0.000051
94	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
94	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
94	Dioxin/furans	2,3,4,6,7,8-HxCDF	E	3	1	0.000020	0.00019	0.000045	0.000044
94	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	2	0.000010	0.000060	0.000036	0.000028
94	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	1	0.000020	0.000030	0.000017	0.000012
94	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	E	3	1	0.000020	0.000090	0.000035	0.000022
94	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000010	0.000040	0.000020	0.000018
94	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	1	0.000020	0.000030	0.000017	0.000012
94	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	E	3	0	0.000010	0.000090	0.000020	0.000022
94	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	1	0.000010	0.000015	0.0000075	0.0000025
94	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
94	Dioxin/furans	OCDF	E	3	1	0.000040	0.00016	0.000047	0.000031
94	Dioxin/furans	OCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
94	Dioxin/furans	OCDF	WB	3	0	0.000020	0.000040	0.000015	0.0000050
94	Guaiacols/Phenols	4-Chloroguaiacol	E	3	0	960	980	480	4.3
94	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	460	2,500	610	540
94	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	490	2,500	580	570
94	Guaiacols/Phenols	3,4-Dichloroguaiacol	E	3	0	960	980	480	4.3
94	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	460	2,500	610	540
94	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	490	2,500	580	570

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
94	Guaiacols/Phenols	4,5-Dichloroguaiacol	E	3	0	960	980	480	4.3
94	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	460	2,500	610	540
94	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	490	2,500	580	570
94	Guaiacols/Phenols	4,6-Dichloroguaiacol	E	3	0	960	980	480	4.3
94	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	460	2,500	610	540
94	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	490	2,500	580	570
94	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	E	3	0	960	980	480	4.3
94	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	460	2,500	610	540
94	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	490	2,500	580	570
94	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	E	3	0	390	390	190	1.7
94	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	190	980	240	220
94	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	200	990	230	230
94	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	E	3	0	960	980	480	4.3
94	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	460	2,500	610	540
94	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	490	2,500	580	570
94	Guaiacols/Phenols	Tetrachloroguaiacol	E	3	0	390	390	190	1.7
94	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	190	980	240	220
94	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	200	990	230	230
94	Guaiacols/Phenols	2-Chlorophenol	E	3	0	390	390	190	1.7
94	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	190	980	240	220
94	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	200	990	230	230
94	Guaiacols/Phenols	4-Chloro-3-methylphenol	E	3	0	390	390	190	1.7
94	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	190	980	240	220
94	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	200	990	230	230
94	Guaiacols/Phenols	2,4-Dichlorophenol	E	3	0	390	390	190	1.7
94	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	190	980	240	220
94	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	200	990	230	230
94	Guaiacols/Phenols	2,4-Dimethylphenol	E	3	0	960	980	480	4.3
94	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	460	2,500	610	540
94	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	490	2,500	580	570
94	Guaiacols/Phenols	2,4,5-Trichlorophenol	E	3	0	390	390	190	1.7
94	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	190	980	240	220
94	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	200	990	230	230
94	Guaiacols/Phenols	2,4,6-Trichlorophenol	E	3	0	390	390	190	1.7
94	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	190	980	240	220
94	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	200	990	230	230
94	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	E	3	0	390	390	190	1.7
94	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	190	980	240	220
94	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	200	990	230	230
94	Guaiacols/Phenols	Pentachlorophenol	E	3	0	390	390	190	1.7
94	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	190	980	240	220
94	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	200	990	230	230
94	Guaiacols/Phenols	Phenol	E	3	0	390	390	190	1.7
94	Guaiacols/Phenols	Phenol	FS	3	0	190	980	240	220
94	Guaiacols/Phenols	Phenol	WB	3	0	200	990	230	230
94	Metals	Aluminum	E	3	1	1,000	5,000	1,400	1,000
94	Metals	Aluminum	FS	3	3	1,300	1,400	1,300	180
94	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
94	Metals	Antimony	E	3	0	50	250	58	58
94	Metals	Antimony	FS	3	0	50	50	25	0.00
94	Metals	Antimony	WB	3	0	50	50	25	0.00
94	Metals	Arsenic	E	3	2	410	540	400	150
94	Metals	Arsenic	FS	3	3	740	980	830	130
94	Metals	Arsenic	WB	3	3	760	1,000	850	130
94	Metals	Barium	E	3	0	200	1,000	230	230
94	Metals	Barium	FS	3	0	200	200	100	0.00
94	Metals	Barium	WB	3	0	200	200	100	0.00
94	Metals	Beryllium	E	3	0	4.0	20	4.7	4.6
94	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
94	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
94	Metals	Cadmium	E	3	3	22	72	39	29
94	Metals	Cadmium	FS	3	3	11	13	12	1.2
94	Metals	Cadmium	WB	3	3	130	150	140	13
94	Metals	Chromium	E	3	0	100	500	120	120
94	Metals	Chromium	FS	3	0	100	100	50	0.00
94	Metals	Chromium	WB	3	3	100	130	110	15
94	Metals	Cobalt	E	3	3	11	45	28	17
94	Metals	Cobalt	FS	3	0	1.0	1.0	0.50	0.00
94	Metals	Cobalt	WB	3	3	34	81	60	24
94	Metals	Copper	E	3	3	5,300	6,300	5,800	530
94	Metals	Copper	FS	3	3	730	750	740	14
94	Metals	Copper	WB	3	3	1,300	1,500	1,400	65
94	Metals	Lead	E	3	1	10	50	17	11
94	Metals	Lead	FS	3	2	10	27	14	12
94	Metals	Lead	WB	3	2	10	20	14	8.1
94	Metals	Manganese	E	3	3	1,200	1,900	1,400	370

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
94	Metals	Manganese	FS	3	3	81	94	87	6.6
94	Metals	Manganese	WB	3	3	370	480	420	53
94	Metals	Mercury	E	3	0	97	120	53	6.3
94	Metals	Mercury	FS	3	1	110	130	81	36
94	Metals	Mercury	WB	3	1	99	130	77	46
94	Metals	Nickel	E	3	2	45	150	65	18
94	Metals	Nickel	FS	3	3	32	40	33	7.8
94	Metals	Nickel	WB	3	0	30	30	15	0.00
94	Metals	Selenium	E	3	3	3,700	4,300	4,100	330
94	Metals	Selenium	FS	3	3	290	310	300	10
94	Metals	Selenium	WB	3	3	360	530	450	84
94	Metals	Silver	E	3	0	100	500	120	120
94	Metals	Silver	FS	3	0	100	100	50	0.00
94	Metals	Silver	WB	3	0	100	100	50	0.00
94	Metals	Thallium	E	3	0	50	250	58	58
94	Metals	Thallium	FS	3	0	50	50	25	0.00
94	Metals	Thallium	WB	3	0	50	50	25	0.00
94	Metals	Vanadium	E	3	2	16	50	20	4.6
94	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
94	Metals	Vanadium	WB	3	3	13	24	17	6.1
94	Metals	Zinc	E	3	3	46,000	48,000	47,000	1,100
94	Metals	Zinc	FS	3	3	5,200	7,900	6,600	1,300
94	Metals	Zinc	WB	3	3	19,000	24,000	21,000	2,600
94	PCB	Aroclor 1016	E	3	0	19	20	9.7	0.29
94	PCB	Aroclor 1016	FS	3	0	19	20	9.6	0.14
94	PCB	Aroclor 1016	WB	3	0	19	20	9.8	0.29
94	PCB	Aroclor 1221	E	3	0	19	20	9.7	0.29
94	PCB	Aroclor 1221	FS	3	0	19	20	9.6	0.14
94	PCB	Aroclor 1221	WB	3	0	19	20	9.8	0.29
94	PCB	Aroclor 1232	E	3	0	19	20	9.7	0.29
94	PCB	Aroclor 1232	FS	3	0	19	20	9.6	0.14
94	PCB	Aroclor 1232	WB	3	0	19	20	9.8	0.29
94	PCB	Aroclor 1242	E	3	0	19	20	9.7	0.29
94	PCB	Aroclor 1242	FS	3	0	19	20	9.6	0.14
94	PCB	Aroclor 1242	WB	3	0	19	20	9.8	0.29
94	PCB	Aroclor 1248	E	3	0	19	20	9.7	0.29
94	PCB	Aroclor 1248	FS	3	0	19	20	9.6	0.14
94	PCB	Aroclor 1248	WB	3	0	19	20	9.8	0.29
94	PCB	Aroclor 1254	E	3	3	15	18	16	1.5
94	PCB	Aroclor 1254	FS	3	3	16	17	16	0.58
94	PCB	Aroclor 1254	WB	3	3	17	19	18	1.2
94	PCB	Aroclor 1260	E	3	0	19	20	9.7	0.29
94	PCB	Aroclor 1260	FS	3	0	19	20	9.6	0.14
94	PCB	Aroclor 1260	WB	3	0	19	20	9.8	0.29
94	PCB	PCB 077	E	3	3	0.011	0.014	0.013	0.0015
94	PCB	PCB 077	FS	3	3	0.011	0.012	0.012	0.00033
94	PCB	PCB 077	WB	3	3	0.012	0.014	0.013	0.00087
94	PCB	PCB 105	E	3	3	0.20	0.24	0.22	0.022
94	PCB	PCB 105	FS	3	3	0.21	0.22	0.22	0.0043
94	PCB	PCB 105	WB	3	3	0.22	0.27	0.25	0.023
94	PCB	PCB 114	E	3	3	0.018	0.020	0.019	0.0013
94	PCB	PCB 114	FS	3	3	0.018	0.021	0.020	0.0013
94	PCB	PCB 114	WB	3	3	0.020	0.025	0.022	0.0028
94	PCB	PCB 118	E	3	3	0.44	0.51	0.48	0.040
94	PCB	PCB 118	FS	3	3	0.51	0.53	0.52	0.0095
94	PCB	PCB 118	WB	3	3	0.53	0.61	0.57	0.040
94	PCB	PCB 123	E	3	3	0.0081	0.012	0.011	0.0023
94	PCB	PCB 123	FS	3	3	0.011	0.011	0.011	0.00026
94	PCB	PCB 123	WB	3	3	0.012	0.013	0.012	0.00085
94	PCB	PCB 126	E	3	3	0.0021	0.0030	0.0025	0.00046
94	PCB	PCB 126	FS	3	2	0.00088	0.0035	0.0024	0.0017
94	PCB	PCB 126	WB	3	2	0.00082	0.0033	0.0016	0.0014
94	PCB	PCB 156	E	3	3	0.027	0.031	0.030	0.0023
94	PCB	PCB 156	FS	3	3	0.038	0.042	0.040	0.0026
94	PCB	PCB 156	WB	3	3	0.041	0.050	0.044	0.0049
94	PCB	PCB 157	E	3	3	0.0080	0.0094	0.0086	0.00072
94	PCB	PCB 157	FS	3	3	0.011	0.012	0.011	0.00040
94	PCB	PCB 157	WB	3	3	0.010	0.012	0.011	0.00089
94	PCB	PCB 167	E	3	3	0.019	0.022	0.020	0.0016
94	PCB	PCB 167	FS	3	3	0.027	0.028	0.028	0.00056
94	PCB	PCB 167	WB	3	3	0.028	0.033	0.030	0.0026
94	PCB	PCB 169	E	3	0	0.0010	0.0010	0.00050	0.00
94	PCB	PCB 169	FS	3	0	0.0010	0.0010	0.00050	0.00
94	PCB	PCB 169	WB	3	0	0.0010	0.0011	0.00051	0.000023
94	PCB	PCB 170	E	3	3	0.042	0.049	0.045	0.0033
94	PCB	PCB 170	FS	3	3	0.059	0.068	0.064	0.0046

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
94	PCB	PCB 170	WB	3	3	0.067	0.081	0.073	0.0070
94	PCB	PCB 180	E	3	3	0.13	0.17	0.15	0.019
94	PCB	PCB 180	FS	3	3	0.20	0.24	0.22	0.018
94	PCB	PCB 180	WB	3	3	0.23	0.28	0.25	0.024
94	PCB	PCB 189	E	3	3	0.0013	0.0021	0.0017	0.00043
94	PCB	PCB 189	FS	3	3	0.0025	0.0029	0.0027	0.00022
94	PCB	PCB 189	WB	3	2	0.0010	0.0029	0.0019	0.0012
94	Pesticides	Aldrin	E	3	0	1.9	2.0	0.97	0.029
94	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.96	0.014
94	Pesticides	Aldrin	WB	3	0	1.9	2.0	0.98	0.029
94	Pesticides	Alpha-BHC	E	3	0	1.9	2.0	0.97	0.029
94	Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.96	0.014
94	Pesticides	Alpha-BHC	WB	3	0	1.9	2.0	0.98	0.029
94	Pesticides	Alpha-Chlordene	E	3	0	1.9	2.0	0.97	0.029
94	Pesticides	Alpha-Chlordene	FS	3	0	1.9	2.0	0.96	0.014
94	Pesticides	Alpha-Chlordene	WB	3	0	1.9	2.0	0.98	0.029
94	Pesticides	Beta-BHC	E	3	0	1.9	2.0	0.97	0.029
94	Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.96	0.014
94	Pesticides	Beta-BHC	WB	3	0	1.9	2.0	0.98	0.029
94	Pesticides	cis-Chlordane (alpha-Chlordane)	E	3	0	1.9	2.0	0.97	0.029
94	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.9	2.0	0.96	0.014
94	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.9	2.0	0.98	0.029
94	Pesticides	cis-Nonachlor	E	3	0	1.9	2.0	0.97	0.029
94	Pesticides	cis-Nonachlor	FS	3	0	1.9	2.0	0.96	0.014
94	Pesticides	cis-Nonachlor	WB	3	0	1.9	2.0	0.98	0.029
94	Pesticides	DDD-o,p'	E	3	0	1.9	2.0	0.97	0.029
94	Pesticides	DDD-o,p'	FS	3	0	1.9	2.0	0.96	0.014
94	Pesticides	DDD-o,p'	WB	3	0	1.9	2.0	0.98	0.029
94	Pesticides	DDE-o,p'	E	3	0	1.9	2.0	0.97	0.029
94	Pesticides	DDE-o,p'	FS	3	0	1.9	2.0	0.96	0.014
94	Pesticides	DDE-o,p'	WB	3	0	1.9	2.0	0.98	0.029
94	Pesticides	DDT-o,p'	E	3	0	1.9	2.0	0.97	0.029
94	Pesticides	DDT-o,p'	FS	3	0	1.9	2.0	0.96	0.014
94	Pesticides	DDT-o,p'	WB	3	0	1.9	2.0	0.98	0.029
94	Pesticides	DDD-p,p'	E	3	3	2.4	4.1	3.3	0.86
94	Pesticides	DDD-p,p'	FS	3	3	1.9	2.1	2.0	0.12
94	Pesticides	DDD-p,p'	WB	3	2	2.0	3.6	2.3	1.3
94	Pesticides	DDE-p,p'	E	3	3	11	16	13	2.5
94	Pesticides	DDE-p,p'	FS	3	3	11	14	12	1.5
94	Pesticides	DDE-p,p'	WB	3	3	12	16	14	2.1
94	Pesticides	DDT-p,p'	E	3	3	5.2	7.2	6.3	1.0
94	Pesticides	DDT-p,p'	FS	3	3	5.0	5.9	5.3	0.49
94	Pesticides	DDT-p,p'	WB	3	3	5.0	7.7	6.4	1.4
94	Pesticides	DDMU	E	3	0	1.9	2.0	0.97	0.029
94	Pesticides	DDMU	FS	3	0	1.9	2.0	0.96	0.014
94	Pesticides	DDMU	WB	3	0	1.9	2.0	0.98	0.029
94	Pesticides	Delta-BHC	E	3	0	1.9	2.0	0.97	0.029
94	Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.96	0.014
94	Pesticides	Delta-BHC	WB	3	0	1.9	2.0	0.98	0.029
94	Pesticides	Endosulfan Sulfate	E	3	0	1.9	2.0	0.97	0.029
94	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	0.95	na
94	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	na	na
94	Pesticides	Gamma-Chlordane	E	3	0	1.9	2.0	0.97	0.029
94	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.0	0.96	0.014
94	Pesticides	Gamma-Chlordane	WB	3	0	1.9	2.0	0.98	0.029
94	Pesticides	gamma-Chlordene	E	3	0	1.9	2.0	0.97	0.029
94	Pesticides	gamma-Chlordene	FS	3	0	1.9	2.0	0.96	0.014
94	Pesticides	gamma-Chlordene	WB	3	0	1.9	2.0	0.98	0.029
94	Pesticides	Heptachlor	E	3	0	1.9	2.0	0.97	0.029
94	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.96	0.014
94	Pesticides	Heptachlor	WB	3	0	1.9	2.0	0.98	0.029
94	Pesticides	Heptachlor Epoxide	E	3	0	1.9	2.0	0.97	0.029
94	Pesticides	Heptachlor Epoxide	FS	3	0	1.9	2.0	0.96	0.014
94	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	2.0	0.98	0.029
94	Pesticides	Hexachlorobenzene	E	3	3	4.3	5.1	4.7	0.40
94	Pesticides	Hexachlorobenzene	FS	3	3	2.7	3.4	3.1	0.34
94	Pesticides	Hexachlorobenzene	WB	3	3	3.3	3.6	3.5	0.15
94	Pesticides	Lindane	E	3	0	1.9	2.0	0.97	0.029
94	Pesticides	Lindane	FS	3	0	1.9	2.0	0.96	0.014
94	Pesticides	Lindane	WB	3	0	1.9	2.0	0.98	0.029
94	Pesticides	Mirex	E	3	0	1.9	2.0	0.97	0.029
94	Pesticides	Mirex	FS	3	0	1.9	2.0	0.96	0.014
94	Pesticides	Mirex	WB	3	0	1.9	2.0	0.98	0.029
94	Pesticides	Oxychlordane	E	3	0	1.9	2.0	0.97	0.029
94	Pesticides	Oxychlordane	FS	3	0	1.9	2.0	0.96	0.014
94	Pesticides	Oxychlordane	WB	3	0	1.9	2.0	0.98	0.029

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
94	Pesticides	Pentachloroanisol	E	3	3	0.76	2.2	1.3	0.78
94	Pesticides	Pentachloroanisol	FS	3	0	1.9	2.0	0.96	0.014
94	Pesticides	Pentachloroanisol	WB	3	1	1.3	2.0	1.1	0.17
94	Pesticides	Toxaphene	E	3	0	57	59	29	0.58
94	Pesticides	Toxaphene	FS	3	0	56	59	29	0.76
94	Pesticides	Toxaphene	WB	3	0	57	59	29	0.58
94	Pesticides	trans-Nonachlor	E	3	3	2.5	3.3	2.9	0.40
94	Pesticides	trans-Nonachlor	FS	3	3	3.4	3.7	3.5	0.16
94	Pesticides	trans-Nonachlor	WB	3	3	3.7	4.5	4.0	0.42
94	Semivolatiles	1,2,4-Trichlorobenzene	E	3	0	9.8	48	18	11
94	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	4.6	25	6.1	5.4
94	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	4.9	25	5.8	5.7
94	Semivolatiles	1,2-Diphenylhydrazine	E	3	0	9.8	48	18	11
94	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	4.6	25	6.1	5.4
94	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	4.9	25	5.8	5.7
94	Semivolatiles	2,4-Dinitrotoluene	E	3	0	20	96	29	27
94	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	9.2	49	12	11
94	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	9.9	50	12	11
94	Semivolatiles	2,6-Dinitrotoluene	E	3	0	39	190	71	44
94	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	19	98	24	22
94	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	20	99	23	23
94	Semivolatiles	2-Chloronaphthalene	E	3	0	20	96	35	22
94	Semivolatiles	2-Chloronaphthalene	FS	3	0	9.2	49	12	11
94	Semivolatiles	2-Chloronaphthalene	WB	3	0	9.9	50	12	11
94	Semivolatiles	4-Bromophenyl-Phenylether	E	3	0	9.8	48	18	11
94	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	4.6	25	6.1	5.4
94	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	4.9	25	5.8	5.7
94	Semivolatiles	4-Chlorophenyl-Phenylether	E	3	0	9.8	48	18	11
94	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	4.6	25	6.1	5.4
94	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	4.9	25	5.8	5.7
94	Semivolatiles	Acenaphthene	E	3	0	20	96	35	22
94	Semivolatiles	Acenaphthene	FS	3	0	9.2	49	12	11
94	Semivolatiles	Acenaphthene	WB	3	0	9.9	50	12	11
94	Semivolatiles	Acenaphthylene	E	3	0	9.8	48	18	11
94	Semivolatiles	Acenaphthylene	FS	3	0	4.6	25	6.1	5.4
94	Semivolatiles	Acenaphthylene	WB	3	0	4.9	25	5.8	5.7
94	Semivolatiles	Anthracene	E	3	0	9.8	48	18	11
94	Semivolatiles	Anthracene	FS	3	0	4.6	25	6.1	5.4
94	Semivolatiles	Anthracene	WB	3	0	4.9	25	5.8	5.7
94	Semivolatiles	Benzene, 1,2-dichloro-	E	3	0	9.8	48	18	11
94	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	4.6	25	6.1	5.4
94	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	4.9	25	5.8	5.7
94	Semivolatiles	Benzene, 1,3-dichloro-	E	3	0	9.8	48	18	11
94	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	4.6	25	6.1	5.4
94	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	4.9	25	5.8	5.7
94	Semivolatiles	Benzene, 1,4-dichloro-	E	3	0	9.8	48	18	11
94	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	4.6	25	6.1	5.4
94	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	4.9	25	5.8	5.7
94	Semivolatiles	Benzo(a)anthracene	E	3	0	9.8	48	18	11
94	Semivolatiles	Benzo(a)anthracene	FS	3	0	17	25	11	2.0
94	Semivolatiles	Benzo(a)anthracene	WB	3	0	25	25	12	0.076
94	Semivolatiles	Benzo(a)pyrene	E	3	0	9.8	48	18	11
94	Semivolatiles	Benzo(a)pyrene	FS	3	0	17	25	11	2.0
94	Semivolatiles	Benzo(a)pyrene	WB	3	0	25	25	12	0.076
94	Semivolatiles	Benzo(g,h,i)perylene	E	3	0	20	96	35	22
94	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	34	49	22	4.1
94	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	49	50	25	0.15
94	Semivolatiles	Benzo[b]Fluoranthene	E	3	0	9.8	48	18	11
94	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	17	25	11	2.0
94	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	25	25	12	0.076
94	Semivolatiles	Benzo[k]fluoranthene	E	3	0	9.8	48	18	11
94	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	17	25	11	2.0
94	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	25	25	12	0.076
94	Semivolatiles	bis(2-Chloroisopropyl)ether	E	3	0	20	96	35	22
94	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	9.2	49	12	11
94	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	9.9	50	12	11
94	Semivolatiles	Chrysene	E	3	0	9.8	48	18	11
94	Semivolatiles	Chrysene	FS	3	0	17	25	11	2.0
94	Semivolatiles	Chrysene	WB	3	0	25	25	12	0.076
94	Semivolatiles	Dibenz[a,h]anthracene	E	3	0	20	96	35	22
94	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	34	49	22	4.1
94	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	49	50	25	0.15
94	Semivolatiles	Dibenzofuran	E	3	0	9.8	48	18	11
94	Semivolatiles	Dibenzofuran	FS	3	0	4.6	25	6.1	5.4
94	Semivolatiles	Dibenzofuran	WB	3	0	4.9	25	5.8	5.7
94	Semivolatiles	Fluoranthene	E	3	0	20	96	35	22

Appendix D-1: Site Summary Statistics
Spring Chinook Salmon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
94	Semivolatiles	Fluoranthene	FS	3	0	9.2	49	12	11
94	Semivolatiles	Fluoranthene	WB	3	0	9.9	50	12	11
94	Semivolatiles	9H-Fluorene	E	3	0	9.8	48	18	11
94	Semivolatiles	9H-Fluorene	FS	3	0	4.6	25	6.1	5.4
94	Semivolatiles	9H-Fluorene	WB	3	0	4.9	25	5.8	5.7
94	Semivolatiles	Hexachlorobutadiene	E	3	0	9.8	48	18	11
94	Semivolatiles	Hexachlorobutadiene	FS	3	0	4.6	25	6.1	5.4
94	Semivolatiles	Hexachlorobutadiene	WB	3	0	4.9	25	5.8	5.7
94	Semivolatiles	Hexachloroethane	E	3	0	9.8	48	18	11
94	Semivolatiles	Hexachloroethane	FS	3	0	4.6	25	6.1	5.4
94	Semivolatiles	Hexachloroethane	WB	3	0	4.9	25	5.8	5.7
94	Semivolatiles	Indeno(1,2,3-cd)pyrene	E	3	0	20	96	35	22
94	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	34	49	22	4.1
94	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	49	50	25	0.15
94	Semivolatiles	Naphthalene	E	3	1	57	91	51	25
94	Semivolatiles	Naphthalene	FS	3	0	42	63	26	5.1
94	Semivolatiles	Naphthalene	WB	3	0	35	43	20	2.2
94	Semivolatiles	Naphthalene, 1-methyl-	E	3	0	9.8	48	18	11
94	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	4.6	25	6.1	5.4
94	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	4.9	25	5.8	5.7
94	Semivolatiles	Naphthalene, 2-methyl-	E	3	1	12	48	20	6.9
94	Semivolatiles	Naphthalene, 2-methyl-	FS	3	1	6.1	29	8.0	6.0
94	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	4.9	25	5.8	5.7
94	Semivolatiles	Nitrobenzene	E	3	0	9.8	48	18	11
94	Semivolatiles	Nitrobenzene	FS	3	0	4.6	25	6.1	5.4
94	Semivolatiles	Nitrobenzene	WB	3	0	4.9	25	5.8	5.7
94	Semivolatiles	n-Nitrosodiphenylamine	E	3	0	0.00	0.00	na	na
94	Semivolatiles	n-Nitrosodiphenylamine	FS	3	0	0.00	0.00	na	na
94	Semivolatiles	n-Nitrosodiphenylamine	WB	3	0	0.00	0.00	na	na
94	Semivolatiles	Phenanthrene	E	3	0	9.8	48	18	11
94	Semivolatiles	Phenanthrene	FS	3	0	4.6	25	6.1	5.4
94	Semivolatiles	Phenanthrene	WB	3	0	5.0	25	6.0	5.5
94	Semivolatiles	Pyrene	E	3	0	20	96	35	22
94	Semivolatiles	Pyrene	FS	3	0	34	49	22	4.1
94	Semivolatiles	Pyrene	WB	3	1	13	50	21	7.0
94	Semivolatiles	Retene	E	3	0	20	96	35	22
94	Semivolatiles	Retene	FS	3	0	34	49	22	4.1
94	Semivolatiles	Retene	WB	3	0	49	50	25	0.15

Appendix D-1: Site Summary Statistics
Steelhead

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Dioxin/furans	2,3,7,8-TCDD	E	1	0	0.000030	0.000030	0.000015	na
8	Dioxin/furans	2,3,7,8-TCDD	FS	6	0	0.000010	0.000050	0.000013	0.000082
8	Dioxin/furans	2,3,7,8-TCDD	WB	6	2	0.000010	0.000060	0.000021	0.000021
8	Dioxin/furans	1,2,3,7,8-PeCDD	E	1	0	0.000030	0.000030	0.000015	na
8	Dioxin/furans	1,2,3,7,8-PeCDD	FS	6	4	0.000010	0.00011	0.000068	0.000047
8	Dioxin/furans	1,2,3,7,8-PeCDD	WB	6	2	0.000010	0.00019	0.000062	0.000073
8	Dioxin/furans	1,2,3,4,7,8-HxCDD	E	1	0	0.000020	0.000020	0.000010	na
8	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	6	1	0.000010	0.000030	0.000012	0.000052
8	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	6	1	0.000010	0.000030	0.000011	0.000097
8	Dioxin/furans	1,2,3,6,7,8-HxCDD	E	1	0	0.000020	0.000020	0.000010	na
8	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	6	1	0.000010	0.000050	0.000017	0.000017
8	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	6	3	0.000010	0.000070	0.000031	0.000028
8	Dioxin/furans	1,2,3,7,8,9-HxCDD	E	1	0	0.000020	0.000020	0.000010	na
8	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	6	1	0.000010	0.000040	0.000014	0.000013
8	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	6	3	0.000010	0.000040	0.000023	0.000016
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	E	1	1	0.000070	0.000070	0.000070	na
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	6	3	0.000010	0.00014	0.000062	0.000058
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	6	2	0.000030	0.00020	0.000064	0.000071
8	Dioxin/furans	OCDD	E	1	1	0.00038	0.00038	0.00038	na
8	Dioxin/furans	OCDD	FS	6	5	0.000020	0.00078	0.00029	0.00027
8	Dioxin/furans	OCDD	WB	6	4	0.000050	0.0022	0.00073	0.00092
8	Dioxin/furans	2,3,7,8-TCDF	E	1	1	0.00022	0.00022	0.00022	na
8	Dioxin/furans	2,3,7,8-TCDF	FS	6	6	0.00027	0.00045	0.00034	0.000065
8	Dioxin/furans	2,3,7,8-TCDF	WB	6	6	0.00025	0.00060	0.00039	0.00013
8	Dioxin/furans	1,2,3,7,8-PeCDF	E	1	0	0.000020	0.000020	0.000010	na
8	Dioxin/furans	1,2,3,7,8-PeCDF	FS	6	1	0.000010	0.00010	0.000027	0.000036
8	Dioxin/furans	1,2,3,7,8-PeCDF	WB	6	3	0.000010	0.00019	0.000072	0.000080
8	Dioxin/furans	2,3,4,7,8-PeCDF	E	1	0	0.000020	0.000020	0.000010	na
8	Dioxin/furans	2,3,4,7,8-PeCDF	FS	6	3	0.000010	0.00029	0.00014	0.00014
8	Dioxin/furans	2,3,4,7,8-PeCDF	WB	6	3	0.000010	0.00037	0.00013	0.00015
8	Dioxin/furans	1,2,3,4,7,8-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
8	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	6	1	0.000010	0.000030	0.000013	0.000088
8	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	6	2	0.000020	0.000040	0.000022	0.000015
8	Dioxin/furans	1,2,3,6,7,8-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
8	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	6	1	0.000010	0.000030	0.000013	0.000088
8	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	6	2	0.000020	0.000070	0.000028	0.000024
8	Dioxin/furans	1,2,3,7,8,9-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
8	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	6	1	0.000010	0.000030	0.000010	0.000032
8	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	6	0	0.000020	0.000040	0.000013	0.000042
8	Dioxin/furans	2,3,4,6,7,8-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
8	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	6	2	0.000010	0.000050	0.000020	0.000017
8	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	6	2	0.000020	0.000080	0.000028	0.000027
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	E	1	0	0.000020	0.000020	0.000010	na
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	6	1	0.000010	0.000050	0.000018	0.000016
8	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	6	0	0.000020	0.000070	0.000021	0.000011
8	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	E	1	0	0.000020	0.000020	0.000010	na
8	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	6	0	0.000010	0.000030	0.000012	0.000041
8	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	6	0	0.000020	0.000070	0.000021	0.000011
8	Dioxin/furans	OCDF	E	1	0	0.000030	0.000030	0.000015	na
8	Dioxin/furans	OCDF	FS	6	1	0.000030	0.000080	0.000031	0.000017
8	Dioxin/furans	OCDF	WB	6	1	0.000050	0.00043	0.00012	0.00016
8	Guaiacols/Phenols	4-Chloroguaiacol	E	1	0	920	920	460	na
8	Guaiacols/Phenols	4-Chloroguaiacol	FS	6	0	930	990	480	13
8	Guaiacols/Phenols	4-Chloroguaiacol	WB	6	0	920	990	480	13
8	Guaiacols/Phenols	3,4-Dichloroguaiacol	E	1	0	920	920	460	na
8	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	6	0	930	990	480	13
8	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	6	0	920	990	480	13
8	Guaiacols/Phenols	4,5-Dichloroguaiacol	E	1	0	920	920	460	na
8	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	6	0	930	990	480	13
8	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	6	0	920	990	480	13
8	Guaiacols/Phenols	4,6-Dichloroguaiacol	E	1	0	920	920	460	na
8	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	6	0	930	990	480	13
8	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	6	0	920	990	480	13
8	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	E	1	0	920	920	460	na
8	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	6	0	930	990	480	13
8	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	6	0	920	990	480	13
8	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	E	1	0	370	370	180	na
8	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	6	0	370	400	190	5.1
8	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	6	0	370	400	190	5.1
8	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	E	1	0	920	920	460	na
8	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	6	0	930	990	480	13
8	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	6	0	920	990	480	13
8	Guaiacols/Phenols	Tetrachloroguaiacol	E	1	0	370	370	180	na
8	Guaiacols/Phenols	Tetrachloroguaiacol	FS	6	0	370	400	190	5.1
8	Guaiacols/Phenols	Tetrachloroguaiacol	WB	6	0	370	400	190	5.1
8	Guaiacols/Phenols	2-Chlorophenol	E	1	0	370	370	180	na

Appendix D-1: Site Summary Statistics
Steelhead

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Guaiacols/Phenols	2-Chlorophenol	FS	6	0	370	400	190	5.1
8	Guaiacols/Phenols	2-Chlorophenol	WB	6	0	370	400	190	5.1
8	Guaiacols/Phenols	4-Chloro-3-methylphenol	E	1	0	370	370	180	na
8	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	6	0	370	400	190	5.1
8	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	6	0	370	400	190	5.1
8	Guaiacols/Phenols	2,4-Dichlorophenol	E	1	0	370	370	180	na
8	Guaiacols/Phenols	2,4-Dichlorophenol	FS	6	0	370	400	190	5.1
8	Guaiacols/Phenols	2,4-Dichlorophenol	WB	6	0	370	400	190	5.1
8	Guaiacols/Phenols	2,4-Dimethylphenol	E	1	0	920	920	460	na
8	Guaiacols/Phenols	2,4-Dimethylphenol	FS	6	0	930	990	480	13
8	Guaiacols/Phenols	2,4-Dimethylphenol	WB	6	0	920	990	480	13
8	Guaiacols/Phenols	2,4,5-Trichlorophenol	E	1	0	370	370	180	na
8	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	6	0	370	400	190	5.1
8	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	6	0	370	400	190	5.1
8	Guaiacols/Phenols	2,4,6-Trichlorophenol	E	1	0	370	370	180	na
8	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	6	0	370	400	190	5.1
8	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	6	0	370	400	190	5.1
8	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	E	1	0	370	370	180	na
8	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	6	0	370	400	190	5.1
8	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	6	0	370	400	190	5.1
8	Guaiacols/Phenols	Pentachlorophenol	E	1	0	370	370	180	na
8	Guaiacols/Phenols	Pentachlorophenol	FS	6	0	370	400	190	5.1
8	Guaiacols/Phenols	Pentachlorophenol	WB	6	0	370	400	190	5.1
8	Guaiacols/Phenols	Phenol	E	1	0	370	370	180	na
8	Guaiacols/Phenols	Phenol	FS	6	0	370	400	190	5.1
8	Guaiacols/Phenols	Phenol	WB	6	0	370	400	190	5.1
8	Metals	Aluminum	E	1	1	4,500	4,500	4,500	na
8	Metals	Aluminum	FS	6	4	1,000	1,600	1,100	460
8	Metals	Aluminum	WB	6	2	680	1,000	570	120
8	Metals	Antimony	E	1	0	50	50	25	na
8	Metals	Antimony	FS	6	0	50	50	25	0.00
8	Metals	Antimony	WB	6	0	50	50	25	0.00
8	Metals	Arsenic	E	1	0	50	50	25	na
8	Metals	Arsenic	FS	6	6	470	690	600	75
8	Metals	Arsenic	WB	6	6	480	720	610	78
8	Metals	Barium	E	1	0	200	200	100	na
8	Metals	Barium	FS	6	1	200	320	140	90
8	Metals	Barium	WB	6	0	200	200	100	0.00
8	Metals	Beryllium	E	1	0	4.0	4.0	2.0	na
8	Metals	Beryllium	FS	6	0	4.0	4.0	2.0	0.00
8	Metals	Beryllium	WB	6	0	4.0	4.0	2.0	0.00
8	Metals	Cadmium	E	1	1	34	34	34	na
8	Metals	Cadmium	FS	6	6	4.7	8.7	6.7	1.7
8	Metals	Cadmium	WB	6	6	29	57	50	11
8	Metals	Chromium	E	1	1	220	220	220	na
8	Metals	Chromium	FS	6	1	100	200	75	61
8	Metals	Chromium	WB	6	3	100	120	82	35
8	Metals	Cobalt	E	1	1	170	170	170	na
8	Metals	Cobalt	FS	6	6	6.8	150	56	59
8	Metals	Cobalt	WB	6	6	58	150	110	34
8	Metals	Copper	E	1	1	18,000	18,000	18,000	na
8	Metals	Copper	FS	6	6	540	740	660	82
8	Metals	Copper	WB	6	6	2,000	3,200	2,700	400
8	Metals	Lead	E	1	1	41	41	41	na
8	Metals	Lead	FS	6	3	10	23	11	7.6
8	Metals	Lead	WB	6	3	10	28	13	9.7
8	Metals	Manganese	E	1	1	2,200	2,200	2,200	na
8	Metals	Manganese	FS	6	6	100	200	140	37
8	Metals	Manganese	WB	6	6	250	430	360	67
8	Metals	Mercury	E	1	0	43	43	22	na
8	Metals	Mercury	FS	6	6	70	140	110	25
8	Metals	Mercury	WB	6	5	50	110	83	30
8	Metals	Nickel	E	1	1	520	520	520	na
8	Metals	Nickel	FS	6	5	30	70	44	19
8	Metals	Nickel	WB	6	5	30	160	86	61
8	Metals	Selenium	E	1	1	4,500	4,500	4,500	na
8	Metals	Selenium	FS	6	5	330	500	340	50
8	Metals	Selenium	WB	6	6	480	790	680	110
8	Metals	Silver	E	1	0	100	100	50	na
8	Metals	Silver	FS	6	0	100	100	50	0.00
8	Metals	Silver	WB	6	0	100	100	50	0.00
8	Metals	Thallium	E	1	0	50	50	25	na
8	Metals	Thallium	FS	6	0	50	50	25	0.00
8	Metals	Thallium	WB	6	0	50	50	25	0.00
8	Metals	Vanadium	E	1	1	110	110	110	na
8	Metals	Vanadium	FS	6	4	11	24	14	5.8

Appendix D-1: Site Summary Statistics
Steelhead

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Metals	Vanadium	WB	6	6	27	150	71	46
8	Metals	Zinc	E	1	1	76,000	76,000	76,000	na
8	Metals	Zinc	FS	6	6	7,100	9,300	8,100	770
8	Metals	Zinc	WB	6	6	18,000	23,000	20,000	2,000
8	PCBs	Aroclor 1016	E	1	0	20	20	10	na
8	PCBs	Aroclor 1016	FS	6	0	19	20	9.9	0.20
8	PCBs	Aroclor 1016	WB	6	0	19	20	9.7	0.26
8	PCBs	Aroclor 1221	E	1	0	20	20	10	na
8	PCBs	Aroclor 1221	FS	6	0	19	20	9.9	0.20
8	PCBs	Aroclor 1221	WB	6	0	19	20	9.7	0.26
8	PCBs	Aroclor 1232	E	1	0	20	20	10	na
8	PCBs	Aroclor 1232	FS	6	0	19	20	9.9	0.20
8	PCBs	Aroclor 1232	WB	6	0	19	20	9.7	0.26
8	PCBs	Aroclor 1242	E	1	0	20	20	10	na
8	PCBs	Aroclor 1242	FS	6	0	19	20	9.9	0.20
8	PCBs	Aroclor 1242	WB	6	0	19	20	9.7	0.26
8	PCBs	Aroclor 1248	E	1	0	20	20	10	na
8	PCBs	Aroclor 1248	FS	6	0	19	20	9.9	0.20
8	PCBs	Aroclor 1248	WB	6	0	19	20	9.7	0.26
8	PCBs	Aroclor 1254	E	1	1	15	15	15	na
8	PCBs	Aroclor 1254	FS	6	6	12	19	15	2.6
8	PCBs	Aroclor 1254	WB	6	6	15	22	18	2.7
8	PCBs	Aroclor 1260	E	1	0	20	20	10	na
8	PCBs	Aroclor 1260	FS	6	0	19	20	9.9	0.20
8	PCBs	Aroclor 1260	WB	6	0	19	20	9.7	0.26
8	PCBs	PCB 77	E	1	1	0.0080	0.0080	0.0080	na
8	PCBs	PCB 77	FS	6	6	0.0090	0.016	0.012	0.0026
8	PCBs	PCB 77	WB	6	6	0.0096	0.019	0.015	0.0040
8	PCBs	PCB 105	E	1	1	0.15	0.15	0.15	na
8	PCBs	PCB 105	FS	6	6	0.17	0.25	0.21	0.036
8	PCBs	PCB 105	WB	6	6	0.17	0.33	0.25	0.057
8	PCBs	PCB 114	E	1	1	0.015	0.015	0.015	na
8	PCBs	PCB 114	FS	6	6	0.017	0.026	0.021	0.0037
8	PCBs	PCB 114	WB	6	6	0.018	0.032	0.026	0.0051
8	PCBs	PCB 118	E	1	1	0.35	0.35	0.35	na
8	PCBs	PCB 118	FS	6	6	0.41	0.62	0.51	0.087
8	PCBs	PCB 118	WB	6	6	0.41	0.79	0.61	0.13
8	PCBs	PCB 123	E	1	1	0.0058	0.0058	0.0058	na
8	PCBs	PCB 123	FS	6	6	0.0065	0.012	0.0089	0.0025
8	PCBs	PCB 123	WB	6	6	0.0071	0.016	0.012	0.0036
8	PCBs	PCB 126	E	1	1	0.0021	0.0021	0.0021	na
8	PCBs	PCB 126	FS	6	4	0.00050	0.0056	0.0033	0.0024
8	PCBs	PCB 126	WB	6	6	0.0025	0.0090	0.0053	0.0022
8	PCBs	PCB 156	E	1	1	0.028	0.028	0.028	na
8	PCBs	PCB 156	FS	6	6	0.034	0.058	0.046	0.0094
8	PCBs	PCB 156	WB	6	6	0.033	0.077	0.055	0.014
8	PCBs	PCB 157	E	1	1	0.0077	0.0077	0.0077	na
8	PCBs	PCB 157	FS	6	6	0.011	0.017	0.013	0.0026
8	PCBs	PCB 157	WB	6	6	0.010	0.020	0.016	0.0033
8	PCBs	PCB 167	E	1	1	0.018	0.018	0.018	na
8	PCBs	PCB 167	FS	6	6	0.024	0.038	0.031	0.0060
8	PCBs	PCB 167	WB	6	6	0.022	0.048	0.036	0.0088
8	PCBs	PCB 169	E	1	0	0.0010	0.0010	0.00050	na
8	PCBs	PCB 169	FS	6	0	0.0010	0.0010	0.00050	0.00
8	PCBs	PCB 169	WB	6	0	0.0010	0.0014	0.00057	0.00010
8	PCBs	PCB 170	E	1	1	0.055	0.055	0.055	na
8	PCBs	PCB 170	FS	6	6	0.067	0.11	0.091	0.019
8	PCBs	PCB 170	WB	6	6	0.077	0.14	0.11	0.022
8	PCBs	PCB 180	E	1	1	0.16	0.16	0.16	na
8	PCBs	PCB 180	FS	6	6	0.22	0.35	0.28	0.055
8	PCBs	PCB 180	WB	6	6	0.24	0.41	0.33	0.060
8	PCBs	PCB 189	E	1	0	0.0010	0.0010	0.00050	na
8	PCBs	PCB 189	FS	6	6	0.0026	0.0055	0.0041	0.0013
8	PCBs	PCB 189	WB	6	6	0.0026	0.0082	0.0047	0.0021
8	Pesticides	Aldrin	E	1	0	2.0	2.0	1.0	na
8	Pesticides	Aldrin	FS	6	0	1.9	2.0	0.99	0.020
8	Pesticides	Aldrin	WB	6	0	1.9	2.0	0.97	0.026
8	Pesticides	Alpha-BHC	E	1	0	2.0	2.0	1.0	na
8	Pesticides	Alpha-BHC	FS	6	0	1.9	2.0	0.99	0.020
8	Pesticides	Alpha-BHC	WB	6	0	1.9	2.0	0.97	0.026
8	Pesticides	Alpha-Chlordene	E	1	0	2.0	2.0	1.0	na
8	Pesticides	Alpha-Chlordene	FS	6	0	1.9	2.0	0.99	0.020
8	Pesticides	Alpha-Chlordene	WB	6	0	1.9	2.0	0.97	0.026
8	Pesticides	Beta-BHC	E	1	0	2.0	2.0	1.0	na
8	Pesticides	Beta-BHC	FS	6	0	1.9	2.0	0.99	0.020
8	Pesticides	Beta-BHC	WB	6	0	1.9	2.0	0.97	0.026

Appendix D-1: Site Summary Statistics
Steelhead

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Pesticides	cis-Chlordane (alpha-Chlordane)	E	1	1	1.3	1.3	1.3	na
8	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	6	2	1.2	2.0	1.2	0.32
8	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	6	1	1.9	2.1	1.2	0.46
8	Pesticides	cis-Nonachlor	E	1	0	2.0	2.0	1.0	na
8	Pesticides	cis-Nonachlor	FS	6	0	1.9	2.0	0.99	0.020
8	Pesticides	cis-Nonachlor	WB	6	0	1.9	2.0	0.97	0.026
8	Pesticides	DDD-o,p'	E	1	0	2.0	2.0	1.0	na
8	Pesticides	DDD-o,p'	FS	6	0	1.9	2.0	0.99	0.020
8	Pesticides	DDD-o,p'	WB	6	0	1.9	2.0	0.97	0.026
8	Pesticides	DDE-o,p'	E	1	0	2.0	2.0	1.0	na
8	Pesticides	DDE-o,p'	FS	6	3	0.78	2.0	0.99	0.13
8	Pesticides	DDE-o,p'	WB	6	2	1.2	2.0	1.1	0.15
8	Pesticides	DDT-o,p'	E	1	0	2.0	2.0	1.0	na
8	Pesticides	DDT-o,p'	FS	6	0	1.9	2.0	0.99	0.020
8	Pesticides	DDT-o,p'	WB	6	0	1.9	2.0	0.97	0.026
8	Pesticides	DDD-p,p'	E	1	1	3.3	3.3	3.3	na
8	Pesticides	DDD-p,p'	FS	6	6	1.7	9.0	4.4	2.9
8	Pesticides	DDD-p,p'	WB	6	6	2.4	11	5.6	3.2
8	Pesticides	DDE-p,p'	E	1	1	6.5	6.5	6.5	na
8	Pesticides	DDE-p,p'	FS	6	6	5.1	9.9	6.8	1.7
8	Pesticides	DDE-p,p'	WB	6	6	5.3	11	8.0	2.5
8	Pesticides	DDT-p,p'	E	1	0	2.0	2.0	1.0	na
8	Pesticides	DDT-p,p'	FS	6	4	1.2	2.3	1.6	0.61
8	Pesticides	DDT-p,p'	WB	6	2	1.9	2.4	1.4	0.63
8	Pesticides	DDMU	E	1	0	2.0	2.0	1.0	na
8	Pesticides	DDMU	FS	6	0	1.9	2.0	0.99	0.020
8	Pesticides	DDMU	WB	6	0	1.9	2.0	0.97	0.026
8	Pesticides	Delta-BHC	E	1	0	2.0	2.0	1.0	na
8	Pesticides	Delta-BHC	FS	6	0	1.9	2.0	0.99	0.020
8	Pesticides	Delta-BHC	WB	6	0	1.9	2.0	0.97	0.026
8	Pesticides	Endosulfan Sulfate	E	1	0	2.0	2.0	1.0	na
8	Pesticides	Endosulfan Sulfate	FS	6	0	1.9	2.0	0.99	0.020
8	Pesticides	Endosulfan Sulfate	WB	6	0	1.9	2.0	0.97	0.026
8	Pesticides	Gamma-Chlordane	E	1	0	2.0	2.0	1.0	na
8	Pesticides	Gamma-Chlordane	FS	6	0	1.9	2.0	0.99	0.020
8	Pesticides	Gamma-Chlordane	WB	6	0	1.9	2.0	0.97	0.026
8	Pesticides	gamma-Chlordene	E	1	0	2.0	2.0	1.0	na
8	Pesticides	gamma-Chlordene	FS	6	0	1.9	2.0	0.99	0.020
8	Pesticides	gamma-Chlordene	WB	6	0	1.9	2.0	0.97	0.026
8	Pesticides	Heptachlor	E	1	0	2.0	2.0	1.0	na
8	Pesticides	Heptachlor	FS	6	0	1.9	2.0	0.99	0.020
8	Pesticides	Heptachlor	WB	6	0	1.9	2.0	0.97	0.026
8	Pesticides	Heptachlor Epoxide	E	1	0	2.0	2.0	1.0	na
8	Pesticides	Heptachlor Epoxide	FS	6	0	1.9	2.0	0.99	0.020
8	Pesticides	Heptachlor Epoxide	WB	6	0	1.9	2.0	0.97	0.026
8	Pesticides	Hexachlorobenzene	E	1	1	1.9	1.9	1.9	na
8	Pesticides	Hexachlorobenzene	FS	6	4	1.3	2.0	1.4	0.34
8	Pesticides	Hexachlorobenzene	WB	6	6	1.4	2.4	1.9	0.34
8	Pesticides	Lindane	E	1	0	2.0	2.0	1.0	na
8	Pesticides	Lindane	FS	6	0	1.9	2.0	0.99	0.020
8	Pesticides	Lindane	WB	6	0	1.9	2.0	0.97	0.026
8	Pesticides	Mirex	E	1	0	2.0	2.0	1.0	na
8	Pesticides	Mirex	FS	6	0	1.9	2.0	0.99	0.020
8	Pesticides	Mirex	WB	6	0	1.9	2.0	0.97	0.026
8	Pesticides	Oxychlordane	E	1	0	2.0	2.0	1.0	na
8	Pesticides	Oxychlordane	FS	6	0	1.9	2.0	0.99	0.020
8	Pesticides	Oxychlordane	WB	6	0	1.9	2.0	0.97	0.026
8	Pesticides	Pentachloroanisol	E	1	0	2.0	2.0	1.0	na
8	Pesticides	Pentachloroanisol	FS	6	0	1.9	2.0	0.99	0.020
8	Pesticides	Pentachloroanisol	WB	6	0	1.9	2.0	0.97	0.026
8	Pesticides	Toxaphene	E	1	0	60	60	30	na
8	Pesticides	Toxaphene	FS	6	0	58	60	30	0.32
8	Pesticides	Toxaphene	WB	6	0	56	59	29	0.58
8	Pesticides	trans-Nonachlor	E	1	1	1.0	1.0	1.0	na
8	Pesticides	trans-Nonachlor	FS	6	2	1.4	2.2	1.3	0.49
8	Pesticides	trans-Nonachlor	WB	6	5	1.4	2.8	1.9	0.68
8	Semivolatiles	1,2,4-Trichlorobenzene	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	1,2,4-Trichlorobenzene	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	1,2,4-Trichlorobenzene	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	1,2-Diphenylhydrazine	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	1,2-Diphenylhydrazine	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	1,2-Diphenylhydrazine	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	2,4-Dinitrotoluene	E	1	0	18	18	9.2	na
8	Semivolatiles	2,4-Dinitrotoluene	FS	6	0	18	20	9.5	0.27
8	Semivolatiles	2,4-Dinitrotoluene	WB	6	0	18	20	9.5	0.26
8	Semivolatiles	2,6-Dinitrotoluene	E	1	0	37	37	18	na

Appendix D-1: Site Summary Statistics
Steelhead

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Semivolatiles	2,6-Dinitrotoluene	FS	6	0	37	40	19	0.54
8	Semivolatiles	2,6-Dinitrotoluene	WB	6	0	37	40	19	0.52
8	Semivolatiles	2-Chloronaphthalene	E	1	0	18	18	9.2	na
8	Semivolatiles	2-Chloronaphthalene	FS	6	0	18	20	9.5	0.27
8	Semivolatiles	2-Chloronaphthalene	WB	6	0	18	20	9.5	0.26
8	Semivolatiles	4-Bromophenyl-Phenylether	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	4-Bromophenyl-Phenylether	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	4-Bromophenyl-Phenylether	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	4-Chlorophenyl-Phenylether	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	4-Chlorophenyl-Phenylether	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	4-Chlorophenyl-Phenylether	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Acenaphthene	E	1	0	18	18	9.2	na
8	Semivolatiles	Acenaphthene	FS	6	0	18	20	9.5	0.27
8	Semivolatiles	Acenaphthene	WB	6	0	18	20	9.5	0.26
8	Semivolatiles	Acenaphthylene	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	Acenaphthylene	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Acenaphthylene	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Anthracene	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	Anthracene	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Anthracene	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Benzene, 1,2-dichloro-	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	Benzene, 1,2-dichloro-	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Benzene, 1,2-dichloro-	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Benzene, 1,3-dichloro-	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	Benzene, 1,3-dichloro-	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Benzene, 1,3-dichloro-	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Benzene, 1,4-dichloro-	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	Benzene, 1,4-dichloro-	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Benzene, 1,4-dichloro-	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Benzo(a)anthracene	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	Benzo(a)anthracene	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Benzo(a)anthracene	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Benzo(a)pyrene	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	Benzo(a)pyrene	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Benzo(a)pyrene	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Benzo(g,h,i)perylene	E	1	0	18	18	9.2	na
8	Semivolatiles	Benzo(g,h,i)perylene	FS	6	0	18	20	9.5	0.27
8	Semivolatiles	Benzo(g,h,i)perylene	WB	6	0	18	20	9.5	0.26
8	Semivolatiles	Benzo[b]Fluoranthene	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	Benzo[b]Fluoranthene	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Benzo[b]Fluoranthene	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Benzo[k]fluoranthene	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	Benzo[k]fluoranthene	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Benzo[k]fluoranthene	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	bis(2-Chloroisopropyl)ether	E	1	0	18	18	9.2	na
8	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	6	0	18	20	9.5	0.27
8	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	6	0	18	20	9.5	0.26
8	Semivolatiles	Chrysene	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	Chrysene	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Chrysene	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Dibenz[a,h]anthracene	E	1	0	18	18	9.2	na
8	Semivolatiles	Dibenz[a,h]anthracene	FS	6	0	18	20	9.5	0.27
8	Semivolatiles	Dibenz[a,h]anthracene	WB	6	0	18	20	9.5	0.26
8	Semivolatiles	Dibenzofuran	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	Dibenzofuran	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Dibenzofuran	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Fluoranthene	E	1	0	18	18	9.2	na
8	Semivolatiles	Fluoranthene	FS	6	0	18	20	9.5	0.27
8	Semivolatiles	Fluoranthene	WB	6	0	18	20	9.5	0.26
8	Semivolatiles	9H-Fluorene	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	9H-Fluorene	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	9H-Fluorene	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Hexachlorobutadiene	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	Hexachlorobutadiene	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Hexachlorobutadiene	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Hexachloroethane	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	Hexachloroethane	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Hexachloroethane	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Indeno(1,2,3-cd)pyrene	E	1	0	18	18	9.2	na
8	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	6	0	18	20	9.5	0.27
8	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	6	0	18	20	9.5	0.26
8	Semivolatiles	Naphthalene	E	1	0	22	22	11	na
8	Semivolatiles	Naphthalene	FS	6	0	9.6	23	7.4	3.3
8	Semivolatiles	Naphthalene	WB	6	0	9.2	31	6.9	4.4
8	Semivolatiles	Naphthalene, 1-methyl-	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	Naphthalene, 1-methyl-	FS	6	0	9.2	9.9	4.8	0.13

Appendix D-1: Site Summary Statistics
Steelhead

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
8	Semivolatiles	Naphthalene, 1-methyl-	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Naphthalene, 2-methyl-	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	Naphthalene, 2-methyl-	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Naphthalene, 2-methyl-	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Nitrobenzene	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	Nitrobenzene	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Nitrobenzene	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Phenanthrene	E	1	0	9.2	9.2	4.6	na
8	Semivolatiles	Phenanthrene	FS	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Phenanthrene	WB	6	0	9.2	9.9	4.8	0.13
8	Semivolatiles	Pyrene	E	1	0	18	18	9.2	na
8	Semivolatiles	Pyrene	FS	6	0	18	20	9.5	0.27
8	Semivolatiles	Pyrene	WB	6	0	18	20	9.5	0.26
8	Semivolatiles	Retene	E	1	0	18	18	9.2	na
8	Semivolatiles	Retene	FS	6	0	18	20	9.5	0.27
8	Semivolatiles	Retene	WB	6	0	18	20	9.5	0.26
25	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000010	0.000040	0.000020	0.000018
25	Dioxin/furans	2,3,7,8-TCDD	WB	3	1	0.000020	0.000040	0.000020	0.000017
25	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	3	0.000050	0.00012	0.000080	0.000036
25	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.000010	0.000050	0.000012	0.000012
25	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	1	0.000020	0.000030	0.000017	0.0000029
25	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000020	0.000040	0.000013	0.0000058
25	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	1	0.000030	0.000040	0.000023	0.000014
25	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	0	0.000020	0.000040	0.000013	0.0000058
25	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	0	0.000020	0.000030	0.000013	0.0000029
25	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	0	0.000020	0.000040	0.000013	0.0000058
25	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	1	0.000020	0.000060	0.000030	0.000026
25	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	2	0.000020	0.000090	0.000053	0.000040
25	Dioxin/furans	OCDD	FS	3	2	0.000060	0.00014	0.000093	0.000057
25	Dioxin/furans	OCDD	WB	3	1	0.000030	0.00013	0.000053	0.000066
25	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00018	0.00045	0.00030	0.00014
25	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00028	0.00048	0.00035	0.00012
25	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.000030	0.00012	0.000070	0.000046
25	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	0	0.000020	0.000030	0.000012	0.0000029
25	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	2	0.000020	0.00032	0.00013	0.00016
25	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00013	0.00037	0.00023	0.00012
25	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	2	0.000010	0.000030	0.000022	0.000014
25	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
25	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
25	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	1	0.000010	0.000050	0.000022	0.000025
25	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
25	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
25	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
25	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	1	0.000010	0.000070	0.000028	0.000036
25	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	1	0.000020	0.000040	0.000022	0.000016
25	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000020	0.000050	0.000015	0.0000087
25	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000020	0.000040	0.000015	0.0000050
25	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000020	0.000050	0.000015	0.0000087
25	Dioxin/furans	OCDF	FS	3	0	0.000030	0.000070	0.000022	0.000012
25	Dioxin/furans	OCDF	WB	3	0	0.000030	0.000050	0.000018	0.0000058
25	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	950	990	490	11
25	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	720	990	440	73
25	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	950	990	490	11
25	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	720	990	440	73
25	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	950	990	490	11
25	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	720	990	440	73
25	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	950	990	490	11
25	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	720	990	440	73
25	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	950	990	490	11
25	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	720	990	440	73
25	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	380	400	190	4.2
25	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	290	400	180	29
25	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	950	990	490	11
25	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	720	990	440	73
25	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	380	400	190	4.2
25	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	290	400	180	29
25	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	380	400	190	4.2
25	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	290	400	180	29
25	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	380	400	190	4.2
25	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	290	400	180	29
25	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	380	400	190	4.2
25	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	290	400	180	29
25	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	950	990	490	11
25	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	720	990	440	73
25	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	380	400	190	4.2
25	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	290	400	180	29

Appendix D-1: Site Summary Statistics
Steelhead

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
25	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	380	400	190	4.2
25	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	290	400	180	29
25	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	380	400	190	4.2
25	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	290	400	180	29
25	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	380	400	190	4.2
25	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	290	400	180	29
25	Guaiacols/Phenols	Phenol	FS	3	0	380	400	190	4.2
25	Guaiacols/Phenols	Phenol	WB	3	0	290	400	180	29
25	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
25	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
25	Metals	Antimony	FS	3	0	50	50	25	0.00
25	Metals	Antimony	WB	3	0	50	50	25	0.00
25	Metals	Arsenic	FS	3	3	500	1,500	930	500
25	Metals	Arsenic	WB	3	3	430	1,200	890	410
25	Metals	Barium	FS	3	0	200	200	100	0.00
25	Metals	Barium	WB	3	1	200	220	140	69
25	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
25	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
25	Metals	Cadmium	FS	3	3	4.6	6.1	5.4	0.75
25	Metals	Cadmium	WB	3	3	59	71	64	6.1
25	Metals	Chromium	FS	3	3	150	210	170	32
25	Metals	Chromium	WB	3	2	100	200	130	76
25	Metals	Cobalt	FS	3	3	140	200	160	34
25	Metals	Cobalt	WB	3	3	170	190	180	12
25	Metals	Copper	FS	3	3	690	830	750	70
25	Metals	Copper	WB	3	3	2,900	3,600	3,200	380
25	Metals	Lead	FS	3	0	10	10	5.0	0.00
25	Metals	Lead	WB	3	0	10	10	5.0	0.00
25	Metals	Manganese	FS	3	3	110	150	130	21
25	Metals	Manganese	WB	3	3	410	570	480	82
25	Metals	Mercury	FS	3	3	110	180	140	38
25	Metals	Mercury	WB	3	2	100	110	88	33
25	Metals	Nickel	FS	3	3	53	58	55	2.6
25	Metals	Nickel	WB	3	3	53	80	65	14
25	Metals	Selenium	FS	3	3	340	400	370	30
25	Metals	Selenium	WB	3	3	800	940	860	73
25	Metals	Silver	FS	3	0	100	100	50	0.00
25	Metals	Silver	WB	3	0	100	100	50	0.00
25	Metals	Thallium	FS	3	0	50	50	25	0.00
25	Metals	Thallium	WB	3	0	50	50	25	0.00
25	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
25	Metals	Vanadium	WB	3	3	13	120	70	55
25	Metals	Zinc	FS	3	3	6,300	6,700	6,400	250
25	Metals	Zinc	WB	3	3	22,000	28,000	24,000	3,300
25	PCBs	Aroclor 1016	FS	3	0	16	19	8.8	0.76
25	PCBs	Aroclor 1016	WB	3	0	18	18	9.0	0.00
25	PCBs	Aroclor 1221	FS	3	0	16	19	8.8	0.76
25	PCBs	Aroclor 1221	WB	3	0	18	18	9.0	0.00
25	PCBs	Aroclor 1232	FS	3	0	16	19	8.8	0.76
25	PCBs	Aroclor 1232	WB	3	0	18	18	9.0	0.00
25	PCBs	Aroclor 1242	FS	3	0	16	19	8.8	0.76
25	PCBs	Aroclor 1242	WB	3	0	18	18	9.0	0.00
25	PCBs	Aroclor 1248	FS	3	0	16	19	8.8	0.76
25	PCBs	Aroclor 1248	WB	3	0	18	18	9.0	0.00
25	PCBs	Aroclor 1254	FS	3	3	8.4	12	10	1.9
25	PCBs	Aroclor 1254	WB	3	3	8.9	13	11	2.1
25	PCBs	Aroclor 1260	FS	3	3	5.8	8.5	6.7	1.5
25	PCBs	Aroclor 1260	WB	3	3	6.4	9.6	8.1	1.6
25	PCBs	PCB 77	FS	3	3	0.0082	0.018	0.013	0.0052
25	PCBs	PCB 77	WB	3	3	0.012	0.019	0.015	0.0038
25	PCBs	PCB 105	FS	3	3	0.15	0.30	0.22	0.078
25	PCBs	PCB 105	WB	3	3	0.20	0.32	0.25	0.060
25	PCBs	PCB 114	FS	3	3	0.016	0.030	0.022	0.0074
25	PCBs	PCB 114	WB	3	3	0.020	0.033	0.025	0.0068
25	PCBs	PCB 118	FS	3	3	0.37	0.72	0.52	0.18
25	PCBs	PCB 118	WB	3	3	0.49	0.76	0.61	0.14
25	PCBs	PCB 123	FS	3	3	0.0069	0.011	0.0082	0.0021
25	PCBs	PCB 123	WB	3	3	0.011	0.014	0.012	0.0015
25	PCBs	PCB 126	FS	3	3	0.0018	0.0056	0.0036	0.0019
25	PCBs	PCB 126	WB	3	1	0.00067	0.0057	0.0022	0.0031
25	PCBs	PCB 156	FS	3	3	0.034	0.081	0.053	0.025
25	PCBs	PCB 156	WB	3	3	0.043	0.076	0.059	0.017
25	PCBs	PCB 157	FS	3	3	0.0084	0.025	0.015	0.0091
25	PCBs	PCB 157	WB	3	3	0.011	0.025	0.017	0.0070
25	PCBs	PCB 167	FS	3	3	0.022	0.046	0.032	0.012
25	PCBs	PCB 167	WB	3	3	0.028	0.047	0.036	0.0096

Appendix D-1: Site Summary Statistics
Steelhead

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
25	PCBs	PCB 169	FS	3	0	0.0025	0.0039	0.0015	0.00041
25	PCBs	PCB 169	WB	3	0	0.0023	0.0032	0.0014	0.00025
25	PCBs	PCB 170	FS	3	3	0.060	0.13	0.090	0.035
25	PCBs	PCB 170	WB	3	3	0.076	0.13	0.10	0.025
25	PCBs	PCB 180	FS	3	3	0.20	0.38	0.27	0.098
25	PCBs	PCB 180	WB	3	3	0.24	0.39	0.31	0.077
25	PCBs	PCB 189	FS	3	3	0.0023	0.0062	0.0038	0.0021
25	PCBs	PCB 189	WB	3	3	0.0025	0.0047	0.0037	0.0011
25	Pesticides	Aldrin	FS	3	0	1.6	1.9	0.88	0.076
25	Pesticides	Aldrin	WB	3	0	1.8	1.8	0.90	0.00
25	Pesticides	Alpha-BHC	FS	3	0	1.6	1.9	0.88	0.076
25	Pesticides	Alpha-BHC	WB	3	0	1.8	1.8	0.90	0.00
25	Pesticides	Alpha-Chlordene	FS	3	0	1.6	1.9	0.88	0.076
25	Pesticides	Alpha-Chlordene	WB	3	0	1.8	1.8	0.90	0.00
25	Pesticides	Beta-BHC	FS	3	0	1.6	1.9	0.88	0.076
25	Pesticides	Beta-BHC	WB	3	0	1.8	1.8	0.90	0.00
25	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.6	1.9	0.88	0.076
25	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.8	1.8	0.90	0.00
25	Pesticides	cis-Nonachlor	FS	3	2	1.5	1.9	1.4	0.39
25	Pesticides	cis-Nonachlor	WB	3	2	1.5	1.9	1.4	0.50
25	Pesticides	DDD-o,p'	FS	3	0	1.6	1.9	0.88	0.076
25	Pesticides	DDD-o,p'	WB	3	0	1.8	1.8	0.90	0.00
25	Pesticides	DDE-o,p'	FS	3	0	1.6	1.9	0.88	0.076
25	Pesticides	DDE-o,p'	WB	3	1	1.5	1.8	1.1	0.35
25	Pesticides	DDT-o,p'	FS	3	0	1.6	1.9	0.88	0.076
25	Pesticides	DDT-o,p'	WB	3	0	1.8	1.8	0.90	0.00
25	Pesticides	DDD-p,p'	FS	3	3	2.0	5.3	3.2	1.9
25	Pesticides	DDD-p,p'	WB	3	3	2.1	6.2	3.9	2.1
25	Pesticides	DDE-p,p'	FS	3	3	7.5	11	9.4	1.8
25	Pesticides	DDE-p,p'	WB	3	3	7.9	15	11	3.7
25	Pesticides	DDT-p,p'	FS	3	3	2.2	4.5	3.0	1.3
25	Pesticides	DDT-p,p'	WB	3	3	1.4	3.6	2.6	1.1
25	Pesticides	DDMU	FS	3	2	1.3	1.9	1.4	0.48
25	Pesticides	DDMU	WB	3	2	1.5	1.8	1.4	0.46
25	Pesticides	Delta-BHC	FS	3	0	1.6	1.9	0.88	0.076
25	Pesticides	Delta-BHC	WB	3	0	1.8	1.8	0.90	0.00
25	Pesticides	Endosulfan Sulfate	FS	3	0	1.6	1.9	0.88	0.076
25	Pesticides	Endosulfan Sulfate	WB	3	0	1.8	1.8	0.90	0.00
25	Pesticides	Gamma-Chlordane	FS	3	0	1.6	1.9	0.88	0.076
25	Pesticides	Gamma-Chlordane	WB	3	0	1.8	1.8	0.90	0.00
25	Pesticides	gamma-Chlordene	FS	3	0	1.6	1.9	0.88	0.076
25	Pesticides	gamma-Chlordene	WB	3	0	1.8	1.8	0.90	0.00
25	Pesticides	Heptachlor	FS	3	0	1.6	1.9	0.88	0.076
25	Pesticides	Heptachlor	WB	3	0	1.8	1.8	0.90	0.00
25	Pesticides	Heptachlor Epoxide	FS	3	0	1.6	1.9	0.88	0.076
25	Pesticides	Heptachlor Epoxide	WB	3	0	1.8	1.8	0.90	0.00
25	Pesticides	Hexachlorobenzene	FS	3	3	1.0	1.4	1.2	0.21
25	Pesticides	Hexachlorobenzene	WB	3	3	1.4	2.1	1.7	0.38
25	Pesticides	Lindane	FS	3	0	1.6	1.9	0.88	0.076
25	Pesticides	Lindane	WB	3	0	1.8	1.8	0.90	0.00
25	Pesticides	Mirex	FS	3	0	1.6	1.9	0.88	0.076
25	Pesticides	Mirex	WB	3	0	1.8	1.8	0.90	0.00
25	Pesticides	Oxychlordane	FS	3	0	1.6	1.9	0.88	0.076
25	Pesticides	Oxychlordane	WB	3	0	1.8	1.8	0.90	0.00
25	Pesticides	Pentachloroanisol	FS	3	0	1.6	1.9	0.88	0.076
25	Pesticides	Pentachloroanisol	WB	3	1	0.91	1.8	0.90	0.0058
25	Pesticides	Toxaphene	FS	3	0	48	57	27	2.3
25	Pesticides	Toxaphene	WB	3	0	53	55	27	0.58
25	Pesticides	trans-Nonachlor	FS	3	2	1.6	2.4	1.7	0.73
25	Pesticides	trans-Nonachlor	WB	3	2	1.8	2.2	1.6	0.67
25	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.5	100	21	27
25	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	19	20	9.7	0.32
25	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	14	20	8.9	1.5
25	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	38	40	19	0.42
25	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	29	40	18	2.9
25	Semivolatiles	2-Chloronaphthalene	FS	3	0	19	20	9.7	0.24
25	Semivolatiles	2-Chloronaphthalene	WB	3	0	14	20	8.9	1.5
25	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	Acenaphthene	FS	3	0	19	20	9.7	0.24
25	Semivolatiles	Acenaphthene	WB	3	0	14	20	8.9	1.5

Appendix D-1: Site Summary Statistics
Steelhead

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
25	Semivolatiles	Acenaphthylene	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	Acenaphthylene	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	Anthracene	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	Anthracene	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	Benzo(a)anthracene	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	Benzo(a)pyrene	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	19	20	9.7	0.24
25	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	14	20	8.9	1.5
25	Semivolatiles	Benzo[b]fluoranthene	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	Benzo[b]fluoranthene	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	19	20	9.7	0.24
25	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	14	20	8.9	1.5
25	Semivolatiles	Chrysene	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	Chrysene	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	19	20	9.7	0.24
25	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	14	20	8.9	1.5
25	Semivolatiles	Dibenzofuran	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	Dibenzofuran	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	Fluoranthene	FS	3	0	19	20	9.7	0.24
25	Semivolatiles	Fluoranthene	WB	3	0	14	20	8.9	1.5
25	Semivolatiles	9H-Fluorene	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	9H-Fluorene	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	Hexachlorobutadiene	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	Hexachloroethane	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	Hexachloroethane	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	19	20	9.7	0.24
25	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	14	20	8.9	1.5
25	Semivolatiles	Naphthalene	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	Naphthalene	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	Nitrobenzene	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	Nitrobenzene	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	Phenanthrene	FS	3	0	9.5	9.9	4.9	0.10
25	Semivolatiles	Phenanthrene	WB	3	0	7.2	9.9	4.4	0.73
25	Semivolatiles	Pyrene	FS	3	0	19	20	9.7	0.24
25	Semivolatiles	Pyrene	WB	3	0	14	20	8.9	1.5
25	Semivolatiles	Retene	FS	3	0	19	20	9.7	0.24
25	Semivolatiles	Retene	WB	3	0	14	20	8.9	1.5
48	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000020	0.000040	0.000022	0.000016
48	Dioxin/furans	2,3,7,8-TCDD	WB	3	2	0.000030	0.000030	0.000025	0.0000087
48	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	3	0.000040	0.000090	0.000067	0.000025
48	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	2	0.000020	0.000090	0.000050	0.000040
48	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	2	0.000010	0.000020	0.000015	0.0000087
48	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	1	0.000010	0.000030	0.000015	0.000013
48	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	1	0.000010	0.000050	0.000022	0.000025
48	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000010	0.000080	0.000052	0.000041
48	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000010	0.000040	0.000025	0.000018
48	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000020	0.000050	0.000030	0.000020
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000010	0.00015	0.000082	0.000073
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.000020	0.00019	0.00012	0.000089
48	Dioxin/furans	OCDD	FS	3	2	0.000010	0.00023	0.00014	0.00012
48	Dioxin/furans	OCDD	WB	3	3	0.00022	0.00027	0.00024	0.000026
48	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00036	0.00051	0.00042	0.000078
48	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00034	0.00060	0.00045	0.00013
48	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	1	0.000020	0.000090	0.000037	0.000046
48	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	2	0.000020	0.00014	0.000083	0.000067
48	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	2	0.000010	0.00016	0.000098	0.000082
48	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	2	0.000020	0.00029	0.00017	0.00014
48	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	1	0.000010	0.00030	0.000013	0.000014
48	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	1	0.000010	0.00020	0.000010	0.0000087
48	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	1	0.000010	0.00010	0.0000067	0.0000029
48	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	0	0.000010	0.00020	0.0000067	0.0000029

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Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
48	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
48	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	2	0.000010	0.000040	0.000022	0.000018
48	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	1	0.000010	0.000030	0.000015	0.000013
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
48	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
48	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	2	0.000010	0.000020	0.000013	0.0000058
48	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
48	Dioxin/furans	OCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
48	Dioxin/furans	OCDF	WB	3	1	0.000010	0.000060	0.000023	0.000032
48	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	740	970	430	58
48	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	900	990	480	23
48	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	740	970	430	58
48	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	900	990	480	23
48	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	740	970	430	58
48	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	900	990	480	23
48	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	740	970	430	58
48	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	900	990	480	23
48	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	740	970	430	58
48	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	900	990	480	23
48	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	300	390	170	23
48	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	360	400	190	9.2
48	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	740	970	430	58
48	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	900	990	480	23
48	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	300	390	170	23
48	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	360	400	190	9.2
48	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	300	390	170	23
48	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	360	400	190	9.2
48	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	300	390	170	23
48	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	360	400	190	9.2
48	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	300	390	170	23
48	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	360	400	190	9.2
48	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	740	970	430	58
48	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	900	990	480	23
48	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	300	390	170	23
48	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	360	400	190	9.2
48	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	300	390	170	23
48	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	360	400	190	9.2
48	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	300	390	170	23
48	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	360	400	190	9.2
48	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	300	390	170	23
48	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	360	400	190	9.2
48	Guaiacols/Phenols	Phenol	FS	3	0	300	390	170	23
48	Guaiacols/Phenols	Phenol	WB	3	0	360	400	190	9.2
48	Metals	Aluminum	FS	3	1	840	1,000	610	200
48	Metals	Aluminum	WB	3	1	500	1,000	500	2.3
48	Metals	Antimony	FS	3	0	50	50	25	0.00
48	Metals	Antimony	WB	3	0	50	50	25	0.00
48	Metals	Arsenic	FS	3	3	290	410	360	61
48	Metals	Arsenic	WB	3	3	290	360	330	36
48	Metals	Barium	FS	3	1	200	210	140	64
48	Metals	Barium	WB	3	2	200	270	200	87
48	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
48	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
48	Metals	Cadmium	FS	3	3	5.8	8.0	6.9	1.1
48	Metals	Cadmium	WB	3	3	70	76	73	3.0
48	Metals	Chromium	FS	3	2	100	120	97	40
48	Metals	Chromium	WB	3	2	100	200	140	81
48	Metals	Cobalt	FS	3	3	81	170	110	53
48	Metals	Cobalt	WB	3	3	100	200	160	52
48	Metals	Copper	FS	3	3	770	820	790	25
48	Metals	Copper	WB	3	3	1,900	2,900	2,400	500
48	Metals	Lead	FS	3	0	10	10	5.0	0.00
48	Metals	Lead	WB	3	0	10	10	5.0	0.00
48	Metals	Manganese	FS	3	3	150	190	170	23
48	Metals	Manganese	WB	3	3	530	620	560	46
48	Metals	Mercury	FS	3	3	110	130	120	7.2
48	Metals	Mercury	WB	3	2	100	110	87	32
48	Metals	Nickel	FS	3	3	44	58	50	7.4
48	Metals	Nickel	WB	3	3	56	94	70	21
48	Metals	Selenium	FS	3	3	280	340	300	32
48	Metals	Selenium	WB	3	3	460	500	480	21
48	Metals	Silver	FS	3	0	100	100	50	0.00
48	Metals	Silver	WB	3	0	100	100	50	0.00
48	Metals	Thallium	FS	3	0	50	50	25	0.00
48	Metals	Thallium	WB	3	0	50	50	25	0.00

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Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Metals	Vanadium	FS	3	0	20	20	10	0.00
48	Metals	Vanadium	WB	3	2	20	51	29	21
48	Metals	Zinc	FS	3	3	8,800	9,600	9,200	420
48	Metals	Zinc	WB	3	3	17,000	22,000	19,000	2,200
48	PCBs	Aroclor 1016	FS	3	0	18	20	9.5	0.50
48	PCBs	Aroclor 1016	WB	3	0	19	20	9.8	0.29
48	PCBs	Aroclor 1221	FS	3	0	18	20	9.5	0.50
48	PCBs	Aroclor 1221	WB	3	0	19	20	9.8	0.29
48	PCBs	Aroclor 1232	FS	3	0	18	20	9.5	0.50
48	PCBs	Aroclor 1232	WB	3	0	19	20	9.8	0.29
48	PCBs	Aroclor 1242	FS	3	0	18	20	9.5	0.50
48	PCBs	Aroclor 1242	WB	3	0	19	20	9.8	0.29
48	PCBs	Aroclor 1248	FS	3	0	18	20	9.5	0.50
48	PCBs	Aroclor 1248	WB	3	0	19	20	9.8	0.29
48	PCBs	Aroclor 1254	FS	3	3	10	17	15	4.0
48	PCBs	Aroclor 1254	WB	3	3	15	25	19	5.3
48	PCBs	Aroclor 1260	FS	3	2	6.6	20	8.0	1.8
48	PCBs	Aroclor 1260	WB	3	2	7.6	20	8.7	1.2
48	PCBs	PCB 77	FS	3	3	0.0097	0.020	0.015	0.0050
48	PCBs	PCB 77	WB	3	3	0.011	0.022	0.016	0.0054
48	PCBs	PCB 105	FS	3	3	0.16	0.26	0.22	0.053
48	PCBs	PCB 105	WB	3	3	0.18	0.31	0.24	0.066
48	PCBs	PCB 114	FS	3	3	0.017	0.026	0.022	0.0047
48	PCBs	PCB 114	WB	3	3	0.019	0.032	0.025	0.0063
48	PCBs	PCB 118	FS	3	3	0.37	0.60	0.51	0.13
48	PCBs	PCB 118	WB	3	3	0.42	0.76	0.58	0.17
48	PCBs	PCB 123	FS	3	3	0.0063	0.012	0.0098	0.0031
48	PCBs	PCB 123	WB	3	3	0.012	0.025	0.017	0.0073
48	PCBs	PCB 126	FS	3	2	0.00074	0.0038	0.0026	0.0019
48	PCBs	PCB 126	WB	3	2	0.0011	0.0050	0.0026	0.0023
48	PCBs	PCB 156	FS	3	3	0.039	0.061	0.051	0.011
48	PCBs	PCB 156	WB	3	3	0.054	0.071	0.060	0.0092
48	PCBs	PCB 157	FS	3	3	0.010	0.016	0.014	0.0030
48	PCBs	PCB 157	WB	3	3	0.013	0.018	0.015	0.0027
48	PCBs	PCB 167	FS	3	3	0.024	0.034	0.030	0.0059
48	PCBs	PCB 167	WB	3	3	0.030	0.044	0.036	0.0071
48	PCBs	PCB 169	FS	3	0	0.0010	0.0013	0.00055	0.000092
48	PCBs	PCB 169	WB	3	0	0.0012	0.0036	0.00100	0.00068
48	PCBs	PCB 170	FS	3	3	0.093	0.12	0.10	0.012
48	PCBs	PCB 170	WB	3	3	0.090	0.18	0.13	0.047
48	PCBs	PCB 180	FS	3	3	0.31	0.38	0.34	0.038
48	PCBs	PCB 180	WB	3	3	0.30	0.56	0.41	0.13
48	PCBs	PCB 189	FS	3	3	0.0025	0.0046	0.0035	0.0010
48	PCBs	PCB 189	WB	3	3	0.0032	0.0060	0.0043	0.0014
48	Pesticides	Aldrin	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	Aldrin	WB	3	0	1.9	2.0	0.98	0.029
48	Pesticides	Alpha-BHC	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	Alpha-BHC	WB	3	0	1.9	2.0	0.98	0.029
48	Pesticides	Alpha-Chlordane	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	Alpha-Chlordane	WB	3	0	1.9	2.0	0.98	0.029
48	Pesticides	Beta-BHC	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	Beta-BHC	WB	3	0	1.9	2.0	0.98	0.029
48	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.9	2.0	0.98	0.029
48	Pesticides	cis-Nonachlor	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	cis-Nonachlor	WB	3	0	1.9	2.0	0.98	0.029
48	Pesticides	DDD-o,p'	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	DDD-o,p'	WB	3	0	1.9	2.0	0.98	0.029
48	Pesticides	DDE-o,p'	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	DDE-o,p'	WB	3	2	1.2	2.0	1.4	0.53
48	Pesticides	DDT-o,p'	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	DDT-o,p'	WB	3	0	1.9	2.0	0.98	0.029
48	Pesticides	DDD-p,p'	FS	3	3	4.8	8.8	7.4	2.3
48	Pesticides	DDD-p,p'	WB	3	3	5.0	7.6	6.4	1.3
48	Pesticides	DDE-p,p'	FS	3	3	15	28	20	7.2
48	Pesticides	DDE-p,p'	WB	3	3	21	29	26	4.2
48	Pesticides	DDT-p,p'	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	DDT-p,p'	WB	3	0	1.9	2.0	0.98	0.029
48	Pesticides	DDMU	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	DDMU	WB	3	0	1.9	2.0	0.98	0.029
48	Pesticides	Delta-BHC	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	Delta-BHC	WB	3	0	1.9	2.0	0.98	0.029
48	Pesticides	Endosulfan Sulfate	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	Endosulfan Sulfate	WB	3	0	1.9	2.0	0.98	0.029
48	Pesticides	Gamma-Chlordane	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	Gamma-Chlordane	WB	3	0	1.9	2.0	0.98	0.029

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Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Pesticides	gamma-Chlordene	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	gamma-Chlordene	WB	3	0	1.9	2.0	0.98	0.029
48	Pesticides	Heptachlor	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	Heptachlor	WB	3	0	1.9	2.0	0.98	0.029
48	Pesticides	Heptachlor Epoxide	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	2.0	0.98	0.029
48	Pesticides	Hexachlorobenzene	FS	3	2	1.6	2.0	1.4	0.38
48	Pesticides	Hexachlorobenzene	WB	3	3	1.1	2.1	1.6	0.50
48	Pesticides	Lindane	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	Lindane	WB	3	0	1.9	2.0	0.98	0.029
48	Pesticides	Mirex	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	Mirex	WB	3	0	1.9	2.0	0.98	0.029
48	Pesticides	Oxychlordane	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	Oxychlordane	WB	3	0	1.9	2.0	0.98	0.029
48	Pesticides	Pentachloroanisol	FS	3	0	1.8	2.0	0.95	0.050
48	Pesticides	Pentachloroanisol	WB	3	0	1.9	2.0	0.98	0.029
48	Pesticides	Toxaphene	FS	3	0	54	59	29	1.3
48	Pesticides	Toxaphene	WB	3	0	58	61	30	0.76
48	Pesticides	trans-Nonachlor	FS	3	2	1.5	2.0	1.4	0.40
48	Pesticides	trans-Nonachlor	WB	3	3	1.4	2.4	1.8	0.55
48	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	15	19	8.7	1.2
48	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	18	20	9.6	0.46
48	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	30	39	17	2.3
48	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	36	40	19	0.92
48	Semivolatiles	2-Chloronaphthalene	FS	3	0	15	19	8.7	1.2
48	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	20	9.6	0.46
48	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	Acenaphthene	FS	3	0	15	19	8.7	1.2
48	Semivolatiles	Acenaphthene	WB	3	0	18	20	9.6	0.46
48	Semivolatiles	Acenaphthylene	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	Acenaphthylene	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	Anthracene	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	Anthracene	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	Benzo(a)anthracene	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	Benzo(a)anthracene	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	Benzo(a)pyrene	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	Benzo(a)pyrene	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	15	19	8.7	1.2
48	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	20	9.6	0.46
48	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	15	19	8.7	1.2
48	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	20	9.6	0.46
48	Semivolatiles	Chrysene	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	Chrysene	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	15	19	8.7	1.2
48	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	20	9.6	0.46
48	Semivolatiles	Dibenzofuran	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	Dibenzofuran	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	Fluoranthene	FS	3	0	15	19	8.7	1.2
48	Semivolatiles	Fluoranthene	WB	3	0	18	20	9.6	0.46
48	Semivolatiles	9H-Fluorene	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	9H-Fluorene	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	Hexachlorobutadiene	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	Hexachlorobutadiene	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	Hexachloroethane	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	Hexachloroethane	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	15	19	8.7	1.2
48	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	20	9.6	0.46
48	Semivolatiles	Naphthalene	FS	3	0	7.4	11	4.6	0.90
48	Semivolatiles	Naphthalene	WB	3	0	9.0	9.9	4.8	0.24

Appendix D-1: Site Summary Statistics
Steelhead

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
48	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	Nitrobenzene	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	Nitrobenzene	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	Phenanthrene	FS	3	0	7.4	9.6	4.3	0.57
48	Semivolatiles	Phenanthrene	WB	3	0	9.0	9.9	4.8	0.24
48	Semivolatiles	Pyrene	FS	3	0	15	19	8.7	1.2
48	Semivolatiles	Pyrene	WB	3	0	18	20	9.6	0.46
48	Semivolatiles	Retene	FS	3	0	15	19	8.7	1.2
48	Semivolatiles	Retene	WB	3	0	18	20	9.6	0.46
56	Dioxin/furans	2,3,7,8-TCDD	FS	3	0	0.000020	0.000030	0.000013	0.0000029
56	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000010	0.000030	0.000012	0.0000058
56	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000030	0.000080	0.000038	0.000036
56	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	1	0.000010	0.000090	0.000038	0.000045
56	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000020	0.000030	0.000012	0.0000029
56	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000010	0.000040	0.000010	0.0000087
56	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	0	0.000020	0.000030	0.000012	0.0000029
56	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	1	0.000010	0.000060	0.000028	0.000028
56	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000020	0.000030	0.000015	0.0000050
56	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	0	0.000010	0.000040	0.000010	0.0000087
56	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	1	0.000020	0.000060	0.000028	0.000028
56	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	1	0.000030	0.00011	0.000053	0.000050
56	Dioxin/furans	OCDD	FS	3	1	0.000050	0.00023	0.000095	0.00012
56	Dioxin/furans	OCDD	WB	3	1	0.000020	0.0026	0.00086	0.0015
56	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00035	0.00042	0.00038	0.000036
56	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00032	0.00056	0.00041	0.00013
56	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	0	0.000020	0.000040	0.000015	0.0000050
56	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	1	0.000030	0.00010	0.000047	0.000046
56	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00024	0.00025	0.00025	0.0000058
56	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	2	0.000050	0.00035	0.00018	0.00016
56	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000010	0.000050	0.000017	0.000010
56	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
56	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	0	0.000010	0.000040	0.000015	0.0000087
56	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
56	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000050	0.000017	0.000010
56	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
56	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000010	0.000050	0.000017	0.000010
56	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
56	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000020	0.000040	0.000017	0.0000058
56	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000010	0.000040	0.000012	0.0000076
56	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000020	0.000040	0.000017	0.0000058
56	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000040	0.000012	0.0000076
56	Dioxin/furans	OCDF	FS	3	0	0.000040	0.000070	0.000027	0.0000076
56	Dioxin/furans	OCDF	WB	3	0	0.000030	0.00025	0.000053	0.000062
56	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	840	970	460	39
56	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	910	1,000	480	23
56	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	840	970	460	39
56	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	910	1,000	480	23
56	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	840	970	460	39
56	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	910	1,000	480	23
56	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	840	970	460	39
56	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	910	1,000	480	23
56	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	840	970	460	39
56	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	910	1,000	480	23
56	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	340	390	190	15
56	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	370	400	190	9.2
56	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	840	970	460	39
56	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	910	1,000	480	23
56	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	340	390	190	15
56	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	370	400	190	9.2
56	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	340	390	190	15
56	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	370	400	190	9.2
56	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	340	390	190	15
56	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	370	400	190	9.2
56	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	340	390	190	15
56	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	370	400	190	9.2
56	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	840	970	460	39
56	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	910	1,000	480	23
56	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	340	390	190	15
56	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	370	400	190	9.2
56	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	340	390	190	15
56	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	370	400	190	9.2
56	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	340	390	190	15
56	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	370	400	190	9.2

Appendix D-1: Site Summary Statistics
Steelhead

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
56	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	340	390	190	15
56	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	370	400	190	9.2
56	Guaiacols/Phenols	Phenol	FS	3	0	340	390	190	15
56	Guaiacols/Phenols	Phenol	WB	3	0	370	400	190	9.2
56	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
56	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
56	Metals	Antimony	FS	3	0	50	50	25	0.00
56	Metals	Antimony	WB	3	0	50	50	25	0.00
56	Metals	Arsenic	FS	3	3	570	810	660	130
56	Metals	Arsenic	WB	3	3	600	800	670	110
56	Metals	Barium	FS	3	0	200	200	100	0.00
56	Metals	Barium	WB	3	0	200	200	100	0.00
56	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
56	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
56	Metals	Cadmium	FS	3	2	4.0	5.3	4.1	1.8
56	Metals	Cadmium	WB	3	3	41	53	46	6.2
56	Metals	Chromium	FS	3	0	100	100	50	0.00
56	Metals	Chromium	WB	3	3	130	240	180	56
56	Metals	Cobalt	FS	3	3	5.9	7.6	7.0	0.95
56	Metals	Cobalt	WB	3	3	88	130	110	23
56	Metals	Copper	FS	3	3	540	580	560	16
56	Metals	Copper	WB	3	3	3,800	6,800	5,400	1,500
56	Metals	Lead	FS	3	0	10	10	5.0	0.00
56	Metals	Lead	WB	3	3	54	360	170	170
56	Metals	Manganese	FS	3	3	120	160	140	23
56	Metals	Manganese	WB	3	3	310	650	450	170
56	Metals	Mercury	FS	3	3	100	130	120	16
56	Metals	Mercury	WB	3	3	57	120	82	34
56	Metals	Nickel	FS	3	1	30	35	22	12
56	Metals	Nickel	WB	3	3	170	17,000	5,900	9,600
56	Metals	Selenium	FS	3	3	310	350	340	23
56	Metals	Selenium	WB	3	3	700	770	720	39
56	Metals	Silver	FS	3	0	100	100	50	0.00
56	Metals	Silver	WB	3	0	100	100	50	0.00
56	Metals	Thallium	FS	3	0	50	50	25	0.00
56	Metals	Thallium	WB	3	0	50	50	25	0.00
56	Metals	Vanadium	FS	3	2	10	24	16	9.7
56	Metals	Vanadium	WB	3	3	30	58	41	15
56	Metals	Zinc	FS	3	3	6,500	7,600	7,100	580
56	Metals	Zinc	WB	3	3	20,000	23,000	22,000	2,000
56	PCBs	Aroclor 1016	FS	3	0	19	20	9.8	0.29
56	PCBs	Aroclor 1016	WB	3	0	19	20	9.8	0.29
56	PCBs	Aroclor 1221	FS	3	0	19	20	9.8	0.29
56	PCBs	Aroclor 1221	WB	3	0	19	20	9.8	0.29
56	PCBs	Aroclor 1232	FS	3	0	19	20	9.8	0.29
56	PCBs	Aroclor 1232	WB	3	0	19	20	9.8	0.29
56	PCBs	Aroclor 1242	FS	3	0	19	20	9.8	0.29
56	PCBs	Aroclor 1242	WB	3	0	19	20	9.8	0.29
56	PCBs	Aroclor 1248	FS	3	0	19	20	9.8	0.29
56	PCBs	Aroclor 1248	WB	3	0	19	20	9.8	0.29
56	PCBs	Aroclor 1254	FS	3	3	13	18	15	2.6
56	PCBs	Aroclor 1254	WB	3	3	13	24	19	5.7
56	PCBs	Aroclor 1260	FS	3	0	19	20	9.8	0.29
56	PCBs	Aroclor 1260	WB	3	0	19	20	9.8	0.29
56	PCBs	PCB 77	FS	3	3	0.011	0.016	0.014	0.0021
56	PCBs	PCB 77	WB	3	3	0.011	0.022	0.016	0.0060
56	PCBs	PCB 105	FS	3	3	0.19	0.24	0.21	0.023
56	PCBs	PCB 105	WB	3	3	0.20	0.32	0.26	0.062
56	PCBs	PCB 114	FS	3	3	0.019	0.025	0.021	0.0032
56	PCBs	PCB 114	WB	3	3	0.021	0.032	0.026	0.0058
56	PCBs	PCB 118	FS	3	3	0.46	0.58	0.51	0.064
56	PCBs	PCB 118	WB	3	3	0.50	0.78	0.63	0.14
56	PCBs	PCB 123	FS	3	3	0.0076	0.0092	0.0082	0.00088
56	PCBs	PCB 123	WB	3	3	0.0097	0.011	0.010	0.00077
56	PCBs	PCB 126	FS	3	3	0.0040	0.0047	0.0044	0.00036
56	PCBs	PCB 126	WB	3	2	0.00083	0.0058	0.0036	0.0028
56	PCBs	PCB 156	FS	3	3	0.044	0.051	0.046	0.0041
56	PCBs	PCB 156	WB	3	3	0.041	0.081	0.058	0.021
56	PCBs	PCB 157	FS	3	3	0.012	0.014	0.013	0.0010
56	PCBs	PCB 157	WB	3	3	0.013	0.022	0.017	0.0047
56	PCBs	PCB 167	FS	3	3	0.028	0.033	0.030	0.0029
56	PCBs	PCB 167	WB	3	3	0.027	0.043	0.035	0.0079
56	PCBs	PCB 169	FS	3	0	0.0010	0.0010	0.00050	0.00
56	PCBs	PCB 169	WB	3	0	0.0010	0.0010	0.00050	0.00
56	PCBs	PCB 170	FS	3	3	0.078	0.10	0.088	0.014
56	PCBs	PCB 170	WB	3	3	0.084	0.13	0.11	0.023

Appendix D-1: Site Summary Statistics
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Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
56	PCBs	PCB 180	FS	3	3	0.24	0.33	0.28	0.046
56	PCBs	PCB 180	WB	3	3	0.26	0.39	0.33	0.066
56	PCBs	PCB 189	FS	3	3	0.0034	0.0041	0.0037	0.00040
56	PCBs	PCB 189	WB	3	1	0.0010	0.0042	0.0017	0.0022
56	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Aldrin	WB	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Alpha-BHC	WB	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Alpha-Chlordene	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Alpha-Chlordene	WB	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Beta-BHC	WB	3	0	1.9	2.0	0.98	0.029
56	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	3	1.2	1.3	1.2	0.058
56	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	2	1.6	2.3	1.6	0.65
56	Pesticides	cis-Nonachlor	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	cis-Nonachlor	WB	3	2	1.4	2.1	1.5	0.56
56	Pesticides	DDD-o,p'	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	DDD-o,p'	WB	3	0	1.9	2.0	0.98	0.029
56	Pesticides	DDE-o,p'	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	DDE-o,p'	WB	3	0	1.9	2.0	0.98	0.029
56	Pesticides	DDT-o,p'	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	DDT-o,p'	WB	3	0	1.9	2.0	0.98	0.029
56	Pesticides	DDD-p,p'	FS	3	3	2.1	2.5	2.3	0.20
56	Pesticides	DDD-p,p'	WB	3	3	2.3	3.6	2.8	0.70
56	Pesticides	DDE-p,p'	FS	3	3	5.1	5.8	5.5	0.35
56	Pesticides	DDE-p,p'	WB	3	3	5.4	11	8.1	2.8
56	Pesticides	DDT-p,p'	FS	3	2	1.9	2.1	1.7	0.59
56	Pesticides	DDT-p,p'	WB	3	3	3.1	6.0	4.4	1.5
56	Pesticides	DDMU	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	DDMU	WB	3	2	1.4	2.0	1.3	0.31
56	Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Delta-BHC	WB	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Endosulfan Sulfate	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	0.00	na
56	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Gamma-Chlordane	WB	3	0	1.9	2.0	0.98	0.029
56	Pesticides	gamma-Chlordene	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	gamma-Chlordene	WB	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Heptachlor	WB	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Heptachlor Epoxide	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Heptachlor Epoxide	WB	3	0	0.00	0.00	0.00	na
56	Pesticides	Hexachlorobenzene	FS	3	3	1.3	1.5	1.4	0.12
56	Pesticides	Hexachlorobenzene	WB	3	3	1.6	2.9	2.3	0.67
56	Pesticides	Lindane	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Lindane	WB	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Mirex	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Mirex	WB	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Oxychlordane	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Oxychlordane	WB	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Pentachloroanisol	FS	3	0	1.9	2.0	0.98	0.029
56	Pesticides	Pentachloroanisol	WB	3	1	1.7	2.0	1.2	0.40
56	Pesticides	Toxaphene	FS	3	0	58	60	30	0.50
56	Pesticides	Toxaphene	WB	3	0	58	60	30	0.50
56	Pesticides	trans-Nonachlor	FS	3	3	1.2	1.2	1.2	2.1E-08
56	Pesticides	trans-Nonachlor	WB	3	2	1.8	2.5	1.8	0.75
56	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	8.4	9.7	4.6	0.38
56	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	9.1	10	4.8	0.25
56	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.7	9.7	4.9	0.00
56	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	9.9	10	5.0	0.035
56	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	19	19	9.7	0.00
56	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	20	20	10.0	0.00
56	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	34	39	19	1.5
56	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	37	40	19	0.92
56	Semivolatiles	2-Chloronaphthalene	FS	3	0	17	19	9.3	0.75
56	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	20	9.7	0.46
56	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	8.4	9.7	4.6	0.38
56	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	9.1	10	4.8	0.25
56	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	8.4	9.7	4.6	0.38
56	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	9.1	10	4.8	0.25
56	Semivolatiles	Acenaphthene	FS	3	0	17	19	9.3	0.75
56	Semivolatiles	Acenaphthene	WB	3	0	18	20	9.7	0.46
56	Semivolatiles	Acenaphthylene	FS	3	0	8.4	9.7	4.6	0.38
56	Semivolatiles	Acenaphthylene	WB	3	0	9.1	10	4.8	0.25
56	Semivolatiles	Anthracene	FS	3	0	8.4	9.7	4.6	0.38
56	Semivolatiles	Anthracene	WB	3	0	9.1	10	4.8	0.25

Appendix D-1: Site Summary Statistics
Steelhead

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
56	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	8.4	9.7	4.6	0.38
56	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	9.1	10	4.8	0.25
56	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	8.4	9.7	4.6	0.38
56	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	9.1	10	4.8	0.25
56	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	8.4	9.7	4.6	0.38
56	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	9.1	10	4.8	0.25
56	Semivolatiles	Benzo(a)anthracene	FS	3	0	8.4	9.7	4.6	0.38
56	Semivolatiles	Benzo(a)anthracene	WB	3	0	9.1	10	4.8	0.25
56	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.7	9.7	4.9	0.00
56	Semivolatiles	Benzo(a)pyrene	WB	3	0	9.1	10	4.8	0.25
56	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	17	19	9.3	0.75
56	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	20	9.7	0.46
56	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	8.4	9.7	4.6	0.38
56	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	9.1	10	4.8	0.25
56	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	8.4	9.7	4.6	0.38
56	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	9.1	10	4.8	0.25
56	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	17	19	9.3	0.75
56	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	20	9.7	0.46
56	Semivolatiles	Chrysene	FS	3	0	8.4	9.7	4.6	0.38
56	Semivolatiles	Chrysene	WB	3	0	9.1	10	4.8	0.25
56	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	17	19	9.3	0.75
56	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	20	9.7	0.46
56	Semivolatiles	Dibenzofuran	FS	3	0	8.4	9.7	4.6	0.38
56	Semivolatiles	Dibenzofuran	WB	3	0	9.1	10	4.8	0.25
56	Semivolatiles	Fluoranthene	FS	3	0	17	19	9.3	0.75
56	Semivolatiles	Fluoranthene	WB	3	0	18	20	9.7	0.46
56	Semivolatiles	9H-Fluorene	FS	3	0	8.4	9.7	4.6	0.38
56	Semivolatiles	9H-Fluorene	WB	3	0	9.1	10	4.8	0.25
56	Semivolatiles	Hexachlorobutadiene	FS	3	0	8.4	9.7	4.6	0.38
56	Semivolatiles	Hexachlorobutadiene	WB	3	0	9.1	10	4.8	0.25
56	Semivolatiles	Hexachloroethane	FS	3	0	8.4	9.7	4.6	0.38
56	Semivolatiles	Hexachloroethane	WB	3	0	9.1	10	4.8	0.25
56	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	17	19	9.3	0.75
56	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	20	9.7	0.46
56	Semivolatiles	Naphthalene	FS	3	0	11	30	11	4.7
56	Semivolatiles	Naphthalene	WB	3	0	31	70	23	10
56	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	8.4	9.7	4.6	0.38
56	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	9.1	10	4.8	0.25
56	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.7	11	5.0	0.32
56	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	9.9	10	5.1	0.13
56	Semivolatiles	Nitrobenzene	FS	3	0	8.4	9.7	4.6	0.38
56	Semivolatiles	Nitrobenzene	WB	3	0	9.1	10	4.8	0.25
56	Semivolatiles	Phenanthrene	FS	3	0	8.4	9.7	4.6	0.38
56	Semivolatiles	Phenanthrene	WB	3	0	9.1	10	4.8	0.25
56	Semivolatiles	Pyrene	FS	3	0	17	19	9.3	0.75
56	Semivolatiles	Pyrene	WB	3	0	18	20	9.7	0.46
56	Semivolatiles	Retene	FS	3	0	17	19	9.3	0.75
56	Semivolatiles	Retene	WB	3	0	18	20	9.7	0.46
93	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000010	0.000050	0.000020	0.000026
93	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000010	0.000050	0.000013	0.000010
93	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000010	0.00016	0.000058	0.000088
93	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	1	0.000010	0.00015	0.000053	0.000084
93	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	3	0.000080	0.00012	0.00010	0.000020
93	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	1	0.000010	0.00010	0.000038	0.000053
93	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	1	0.000010	0.000080	0.000032	0.000042
93	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000010	0.00010	0.000062	0.000050
93	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000010	0.000030	0.000015	0.000013
93	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
93	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.00012	0.00028	0.00020	0.000080
93	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00016	0.00023	0.00018	0.000040
93	Dioxin/furans	OCDD	FS	3	3	0.00016	0.00036	0.00024	0.00011
93	Dioxin/furans	OCDD	WB	3	3	0.00016	0.00035	0.00023	0.00011
93	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00037	0.00044	0.00040	0.000036
93	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00052	0.00058	0.00054	0.000032
93	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	2	0.000010	0.00011	0.000062	0.000053
93	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.000090	0.00013	0.00011	0.000020
93	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00014	0.00023	0.00018	0.000046
93	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00016	0.00034	0.00023	0.000095
93	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000010	0.000020	0.0000083	0.0000029
93	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	1	0.000010	0.000030	0.000015	0.000013
93	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	2	0.000020	0.000040	0.000030	0.000017
93	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	1	0.000010	0.000040	0.000017	0.000020
93	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	1	0.000010	0.000060	0.000025	0.000030
93	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	1	0.000010	0.000070	0.000028	0.000036
93	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	3	0.00013	0.00017	0.00016	0.000023
93	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00014	0.00017	0.00016	0.000015

Appendix D-1: Site Summary Statistics
Steelhead

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
93	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000010	0.000090	0.000058	0.000046
93	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000020	0.000080	0.000053	0.000038
93	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
93	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
93	Dioxin/furans	OCDF	FS	3	0	0.000020	0.000040	0.000015	0.0000050
93	Dioxin/furans	OCDF	WB	3	1	0.000010	0.000030	0.000015	0.000013
93	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	450	490	230	12
93	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	470	990	320	150
93	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	450	490	230	12
93	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	470	990	320	150
93	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	450	490	230	12
93	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	470	990	320	150
93	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	450	490	230	12
93	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	470	990	320	150
93	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	450	490	230	12
93	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	470	990	320	150
93	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	180	200	93	4.6
93	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	190	390	130	59
93	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	450	490	230	12
93	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	470	990	320	150
93	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	180	200	93	4.6
93	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	190	390	130	59
93	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	180	200	93	4.6
93	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	190	390	130	59
93	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	180	200	93	4.6
93	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	190	390	130	59
93	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	180	200	93	4.6
93	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	190	390	130	59
93	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	450	490	230	12
93	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	470	990	320	150
93	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	180	200	93	4.6
93	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	190	390	130	59
93	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	180	200	93	4.6
93	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	190	390	130	59
93	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	180	200	93	4.6
93	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	190	390	130	59
93	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	180	200	93	4.6
93	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	190	390	130	59
93	Guaiacols/Phenols	Phenol	FS	3	0	180	200	93	4.6
93	Guaiacols/Phenols	Phenol	WB	3	0	190	390	130	59
93	Metals	Aluminum	FS	3	1	1,000	1,000	670	290
93	Metals	Aluminum	WB	3	1	1,000	1,200	730	400
93	Metals	Antimony	FS	3	0	50	50	25	0.00
93	Metals	Antimony	WB	3	0	50	50	25	0.00
93	Metals	Arsenic	FS	3	3	280	390	350	64
93	Metals	Arsenic	WB	3	3	430	490	460	31
93	Metals	Barium	FS	3	3	470	710	560	130
93	Metals	Barium	WB	3	3	320	540	410	110
93	Metals	Beryllium	FS	3	1	6.0	6.3	4.1	1.9
93	Metals	Beryllium	WB	3	2	6.0	7.6	5.9	2.5
93	Metals	Cadmium	FS	3	3	5.4	8.8	7.1	1.7
93	Metals	Cadmium	WB	3	3	50	88	66	20
93	Metals	Chromium	FS	3	0	100	100	50	0.00
93	Metals	Chromium	WB	3	3	150	180	170	17
93	Metals	Cobalt	FS	3	3	5.9	6.9	6.3	0.53
93	Metals	Cobalt	WB	3	3	150	200	180	28
93	Metals	Copper	FS	3	3	790	940	850	80
93	Metals	Copper	WB	3	3	2,400	2,700	2,600	170
93	Metals	Lead	FS	3	1	10	20	10	8.7
93	Metals	Lead	WB	3	3	31	41	36	5.0
93	Metals	Manganese	FS	3	3	130	160	140	14
93	Metals	Manganese	WB	3	3	490	540	520	26
93	Metals	Mercury	FS	3	3	98	210	140	61
93	Metals	Mercury	WB	3	3	66	150	97	48
93	Metals	Nickel	FS	3	3	31	59	45	14
93	Metals	Nickel	WB	3	3	37	120	67	49
93	Metals	Selenium	FS	3	3	250	270	260	12
93	Metals	Selenium	WB	3	3	510	560	530	29
93	Metals	Silver	FS	3	0	200	200	100	0.00
93	Metals	Silver	WB	3	0	200	200	100	0.00
93	Metals	Thallium	FS	3	0	50	50	25	0.00
93	Metals	Thallium	WB	3	0	50	50	25	0.00
93	Metals	Vanadium	FS	3	3	13	18	15	2.6
93	Metals	Vanadium	WB	3	3	39	68	56	15
93	Metals	Zinc	FS	3	3	8,500	8,900	8,700	240
93	Metals	Zinc	WB	3	3	22,000	27,000	25,000	2,700

Appendix D-1: Site Summary Statistics
Steelhead

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
93	PCBs	Aroclor 1016	FS	3	0	19	20	9.8	0.29
93	PCBs	Aroclor 1016	WB	3	0	20	20	10	0.00
93	PCBs	Aroclor 1221	FS	3	0	19	20	9.8	0.29
93	PCBs	Aroclor 1221	WB	3	0	20	20	10	0.00
93	PCBs	Aroclor 1232	FS	3	0	19	20	9.8	0.29
93	PCBs	Aroclor 1232	WB	3	0	20	20	10	0.00
93	PCBs	Aroclor 1242	FS	3	0	19	20	9.8	0.29
93	PCBs	Aroclor 1242	WB	3	0	20	20	10	0.00
93	PCBs	Aroclor 1248	FS	3	0	19	20	9.8	0.29
93	PCBs	Aroclor 1248	WB	3	0	20	20	10	0.00
93	PCBs	Aroclor 1254	FS	3	3	16	17	16	0.58
93	PCBs	Aroclor 1254	WB	3	3	15	29	22	7.0
93	PCBs	Aroclor 1260	FS	3	0	19	20	9.8	0.29
93	PCBs	Aroclor 1260	WB	3	0	20	20	10	0.00
93	PCBs	PCB 77	FS	3	3	0.013	0.015	0.014	0.00091
93	PCBs	PCB 77	WB	3	3	0.015	0.019	0.017	0.0019
93	PCBs	PCB 105	FS	3	3	0.22	0.26	0.23	0.026
93	PCBs	PCB 105	WB	3	3	0.23	0.31	0.28	0.044
93	PCBs	PCB 114	FS	3	3	0.022	0.027	0.024	0.0029
93	PCBs	PCB 114	WB	3	3	0.022	0.032	0.027	0.0051
93	PCBs	PCB 118	FS	3	3	0.50	0.64	0.57	0.071
93	PCBs	PCB 118	WB	3	3	0.55	0.72	0.67	0.10
93	PCBs	PCB 123	FS	3	3	0.011	0.015	0.013	0.0021
93	PCBs	PCB 123	WB	3	3	0.013	0.018	0.015	0.0027
93	PCBs	PCB 126	FS	3	3	0.0033	0.0050	0.0042	0.00084
93	PCBs	PCB 126	WB	3	3	0.0046	0.0059	0.0053	0.00069
93	PCBs	PCB 156	FS	3	3	0.045	0.062	0.053	0.0085
93	PCBs	PCB 156	WB	3	3	0.053	0.073	0.065	0.011
93	PCBs	PCB 157	FS	3	3	0.013	0.017	0.015	0.0022
93	PCBs	PCB 157	WB	3	3	0.013	0.019	0.017	0.0033
93	PCBs	PCB 167	FS	3	3	0.030	0.040	0.034	0.0053
93	PCBs	PCB 167	WB	3	3	0.032	0.044	0.039	0.0062
93	PCBs	PCB 169	FS	3	0	0.0010	0.0010	0.00050	0.00
93	PCBs	PCB 169	WB	3	0	0.0010	0.0016	0.00059	0.00016
93	PCBs	PCB 170	FS	3	3	0.095	0.12	0.11	0.014
93	PCBs	PCB 170	WB	3	3	0.10	0.14	0.12	0.018
93	PCBs	PCB 180	FS	3	3	0.28	0.37	0.32	0.049
93	PCBs	PCB 180	WB	3	3	0.31	0.42	0.38	0.058
93	PCBs	PCB 189	FS	3	3	0.0033	0.0046	0.0039	0.00065
93	PCBs	PCB 189	WB	3	3	0.0036	0.0053	0.0045	0.00085
93	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	Aldrin	WB	3	0	2.0	2.0	1.0	0.00
93	Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	Alpha-BHC	WB	3	0	2.0	2.0	1.0	0.00
93	Pesticides	Alpha-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	Alpha-Chlordane	WB	3	0	2.0	2.0	1.0	0.00
93	Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	Beta-BHC	WB	3	0	2.0	2.0	1.0	0.00
93	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	1	1.6	2.0	1.2	0.35
93	Pesticides	cis-Nonachlor	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	cis-Nonachlor	WB	3	3	2.1	2.3	2.2	0.12
93	Pesticides	DDD-o,p'	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	DDD-o,p'	WB	3	3	1.8	1.9	1.8	0.058
93	Pesticides	DDE-o,p'	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	DDE-o,p'	WB	3	3	1.7	1.9	1.8	0.12
93	Pesticides	DDT-o,p'	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	DDT-o,p'	WB	3	3	1.9	2.3	2.1	0.21
93	Pesticides	DDD-p,p'	FS	3	3	4.2	4.7	4.4	0.29
93	Pesticides	DDD-p,p'	WB	3	3	8.4	9.5	9.1	0.59
93	Pesticides	DDE-p,p'	FS	3	3	14	15	15	0.58
93	Pesticides	DDE-p,p'	WB	3	3	18	33	28	8.4
93	Pesticides	DDT-p,p'	FS	3	3	1.9	3.8	2.9	0.95
93	Pesticides	DDT-p,p'	WB	3	3	3.7	3.9	3.8	0.12
93	Pesticides	DDMU	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	DDMU	WB	3	3	2.0	2.4	2.2	0.20
93	Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	Delta-BHC	WB	3	0	2.0	2.0	1.0	0.00
93	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	0.00	na
93	Pesticides	Endosulfan Sulfate	WB	3	0	2.0	2.0	1.0	0.00
93	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	Gamma-Chlordane	WB	3	0	2.0	2.0	1.0	0.00
93	Pesticides	gamma-Chlordene	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	gamma-Chlordene	WB	3	0	2.0	2.0	1.0	0.00
93	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	Heptachlor	WB	3	0	2.0	2.0	1.0	0.00

Appendix D-1: Site Summary Statistics
Steelhead

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
93	Pesticides	Heptachlor Epoxide	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	Heptachlor Epoxide	WB	3	0	2.0	2.0	1.0	0.00
93	Pesticides	Hexachlorobenzene	FS	3	3	1.6	2.0	1.8	0.21
93	Pesticides	Hexachlorobenzene	WB	3	3	2.6	3.2	2.9	0.31
93	Pesticides	Lindane	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	Lindane	WB	3	0	2.0	2.0	1.0	0.00
93	Pesticides	Mirex	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	Mirex	WB	3	0	2.0	2.0	1.0	0.00
93	Pesticides	Oxychlorthane	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	Oxychlorthane	WB	3	0	2.0	2.0	1.0	0.00
93	Pesticides	Pentachloroanisole	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	Pentachloroanisole	WB	3	0	2.0	2.0	1.0	0.00
93	Pesticides	Toxaphene	FS	3	0	57	60	29	0.76
93	Pesticides	Toxaphene	WB	3	0	59	60	30	0.29
93	Pesticides	trans-Nonachlor	FS	3	0	1.9	2.0	0.98	0.029
93	Pesticides	trans-Nonachlor	WB	3	3	2.8	3.2	3.0	0.21
93	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	9.0	9.8	4.7	0.22
93	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	9.3	52	12	12
93	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	18	20	9.3	0.46
93	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	19	100	24	24
93	Semivolatiles	2-Chloronaphthalene	FS	3	0	9.0	9.8	4.7	0.22
93	Semivolatiles	2-Chloronaphthalene	WB	3	0	9.3	52	12	12
93	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	Acenaphthene	FS	3	0	9.0	9.8	4.7	0.22
93	Semivolatiles	Acenaphthene	WB	3	0	9.3	52	12	12
93	Semivolatiles	Acenaphthylene	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	Acenaphthylene	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	Anthracene	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	Anthracene	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	Benzo(a)anthracene	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	Benzo(a)anthracene	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	Benzo(a)pyrene	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	Benzo(a)pyrene	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	9.0	9.8	4.7	0.22
93	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	9.3	52	12	12
93	Semivolatiles	Benzo[b]fluoranthene	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	Benzo[b]fluoranthene	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	9.0	9.8	4.7	0.22
93	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	9.3	52	12	12
93	Semivolatiles	Chrysene	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	Chrysene	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	9.0	9.8	4.7	0.22
93	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	9.3	52	12	12
93	Semivolatiles	Dibenzofuran	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	Dibenzofuran	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	Fluoranthene	FS	3	0	9.0	9.8	4.7	0.22
93	Semivolatiles	Fluoranthene	WB	3	0	9.3	52	12	12
93	Semivolatiles	9H-Fluorene	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	9H-Fluorene	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	Hexachlorobutadiene	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	Hexachlorobutadiene	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	Hexachloroethane	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	Hexachloroethane	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	9.0	9.8	4.7	0.22
93	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	9.3	52	12	12
93	Semivolatiles	Naphthalene	FS	3	0	14	18	7.8	1.1
93	Semivolatiles	Naphthalene	WB	3	0	24	73	20	14
93	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	4.6	35	7.3	8.6

Appendix D-1: Site Summary Statistics
Steelhead

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
93	Semivolatiles	Nitrobenzene	FS	3	0	4.5	4.9	2.3	0.12
93	Semivolatiles	Nitrobenzene	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	Phenanthrene	FS	3	0	4.5	4.9	2.4	0.12
93	Semivolatiles	Phenanthrene	WB	3	0	4.6	26	5.9	6.1
93	Semivolatiles	Pyrene	FS	3	0	9.0	9.8	4.7	0.22
93	Semivolatiles	Pyrene	WB	3	0	9.3	52	12	12
93	Semivolatiles	Retene	FS	3	0	9.0	9.8	4.7	0.22
93	Semivolatiles	Retene	WB	3	0	9.3	52	12	12
96	Dioxin/furans	2,3,7,8-TCDD	FS	3	2	0.000040	0.000080	0.000050	0.000017
96	Dioxin/furans	2,3,7,8-TCDD	WB	3	1	0.000020	0.000060	0.000027	0.000029
96	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000040	0.00016	0.000068	0.000070
96	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.00022	0.00026	0.00024	0.000020
96	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	1	0.000070	0.00012	0.000067	0.000046
96	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	2	0.000020	0.00014	0.000093	0.000072
96	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	1	0.000070	0.00011	0.000062	0.000038
96	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000020	0.00015	0.000090	0.000072
96	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000050	0.000090	0.000039	0.000052
96	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	1	0.000020	0.000060	0.000027	0.000029
96	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000050	0.00024	0.00015	0.00011
96	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	2	0.000020	0.00029	0.00016	0.00014
96	Dioxin/furans	OCDD	FS	3	3	0.00039	0.0010	0.00070	0.00032
96	Dioxin/furans	OCDD	WB	3	3	0.00025	0.00073	0.00055	0.00026
96	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00039	0.00065	0.00049	0.00014
96	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00048	0.00057	0.00052	0.000045
96	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.00012	0.00021	0.00016	0.000044
96	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.00012	0.00018	0.00016	0.000032
96	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00029	0.00047	0.00035	0.00010
96	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00029	0.00037	0.00034	0.000042
96	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	1	0.000055	0.00013	0.000047	0.000016
96	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	3	0.000030	0.000060	0.000047	0.000015
96	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	1	0.000070	0.00013	0.000060	0.000023
96	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	3	0.000060	0.000090	0.000073	0.000015
96	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	1	0.000065	0.00013	0.000050	0.000015
96	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	2	0.000020	0.000080	0.000053	0.000038
96	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	2	0.000070	0.00023	0.00015	0.00010
96	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00019	0.00022	0.00020	0.000015
96	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000065	0.00010	0.000066	0.000021
96	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	1	0.000020	0.00012	0.000047	0.000064
96	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000045	0.00010	0.000034	0.000014
96	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	1	0.000020	0.000060	0.000027	0.000029
96	Dioxin/furans	OCDF	FS	3	1	0.000060	0.00011	0.000046	0.000014
96	Dioxin/furans	OCDF	WB	3	3	0.000040	0.00014	0.00010	0.000053
96	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	470	970	320	140
96	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	990	1,000	500	2.0
96	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	470	970	320	140
96	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	990	1,000	500	2.0
96	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	470	970	320	140
96	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	990	1,000	500	2.0
96	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	470	970	320	140
96	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	990	1,000	500	2.0
96	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	470	970	320	140
96	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	990	1,000	500	2.0
96	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	190	390	130	55
96	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	400	400	200	0.87
96	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	470	970	320	140
96	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	990	1,000	500	2.0
96	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	190	390	130	55
96	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	400	400	200	0.87
96	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	190	390	130	55
96	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	400	400	200	0.87
96	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	190	390	130	55
96	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	400	400	200	0.87
96	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	190	390	130	55
96	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	400	400	200	0.87
96	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	470	970	320	140
96	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	990	1,000	500	2.0
96	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	190	390	130	55
96	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	400	400	200	0.87
96	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	190	390	130	55
96	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	400	400	200	0.87
96	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	190	390	130	55
96	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	400	400	200	0.87
96	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	190	390	130	55
96	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	400	400	200	0.87
96	Guaiacols/Phenols	Phenol	FS	3	0	190	390	130	55
96	Guaiacols/Phenols	Phenol	WB	3	0	400	400	200	0.87

Appendix D-1: Site Summary Statistics
Steelhead

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
96	Metals	Aluminum	FS	3	1	3,000	8,500	4,200	3,800
96	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
96	Metals	Antimony	FS	3	0	50	50	25	0.00
96	Metals	Antimony	WB	3	0	50	50	25	0.00
96	Metals	Arsenic	FS	3	3	380	530	460	76
96	Metals	Arsenic	WB	3	3	500	520	510	12
96	Metals	Barium	FS	3	2	200	640	380	270
96	Metals	Barium	WB	3	3	320	550	470	130
96	Metals	Beryllium	FS	3	1	4.0	5.1	2.7	1.2
96	Metals	Beryllium	WB	3	1	6.0	6.4	4.1	2.0
96	Metals	Cadmium	FS	3	2	4.0	5.8	3.8	1.9
96	Metals	Cadmium	WB	3	3	38	54	48	8.5
96	Metals	Chromium	FS	3	0	100	100	50	0.00
96	Metals	Chromium	WB	3	3	150	340	210	110
96	Metals	Cobalt	FS	3	3	6.0	7.3	6.5	0.72
96	Metals	Cobalt	WB	3	3	130	280	190	81
96	Metals	Copper	FS	3	3	740	870	810	65
96	Metals	Copper	WB	3	3	3,000	3,200	3,100	79
96	Metals	Lead	FS	3	0	10	10	5.0	0.00
96	Metals	Lead	WB	3	3	31	140	75	60
96	Metals	Manganese	FS	3	3	110	310	180	110
96	Metals	Manganese	WB	3	3	360	630	480	140
96	Metals	Mercury	FS	3	3	120	140	130	13
96	Metals	Mercury	WB	3	3	90	420	200	190
96	Metals	Nickel	FS	3	3	34	60	50	14
96	Metals	Nickel	WB	3	2	30	86	57	37
96	Metals	Selenium	FS	3	3	320	380	350	28
96	Metals	Selenium	WB	3	3	590	660	620	40
96	Metals	Silver	FS	3	0	100	150	58	14
96	Metals	Silver	WB	3	0	200	200	100	0.00
96	Metals	Thallium	FS	3	0	50	50	25	0.00
96	Metals	Thallium	WB	3	0	50	50	25	0.00
96	Metals	Vanadium	FS	3	2	20	44	26	17
96	Metals	Vanadium	WB	3	3	91	190	130	52
96	Metals	Zinc	FS	3	3	6,900	7,800	7,400	470
96	Metals	Zinc	WB	3	3	20,000	31,000	25,000	5,200
96	PCBs	Aroclor 1016	FS	3	0	19	21	10	0.50
96	PCBs	Aroclor 1016	WB	3	0	19	21	10	0.50
96	PCBs	Aroclor 1221	FS	3	0	19	21	10	0.50
96	PCBs	Aroclor 1221	WB	3	0	19	21	10	0.50
96	PCBs	Aroclor 1232	FS	3	0	19	21	10	0.50
96	PCBs	Aroclor 1232	WB	3	0	19	21	10	0.50
96	PCBs	Aroclor 1242	FS	3	0	19	21	10	0.50
96	PCBs	Aroclor 1242	WB	3	0	19	21	10	0.50
96	PCBs	Aroclor 1248	FS	3	0	19	21	10	0.50
96	PCBs	Aroclor 1248	WB	3	0	19	21	10	0.50
96	PCBs	Aroclor 1254	FS	3	3	17	21	19	1.8
96	PCBs	Aroclor 1254	WB	3	3	20	27	22	4.0
96	PCBs	Aroclor 1260	FS	3	0	19	21	10	0.50
96	PCBs	Aroclor 1260	WB	3	0	19	21	10	0.50
96	PCBs	PCB 77	FS	3	3	0.014	0.019	0.017	0.0025
96	PCBs	PCB 77	WB	3	3	0.016	0.020	0.017	0.0022
96	PCBs	PCB 105	FS	3	3	0.30	0.34	0.32	0.018
96	PCBs	PCB 105	WB	3	3	0.29	0.33	0.32	0.026
96	PCBs	PCB 114	FS	3	3	0.029	0.032	0.031	0.0013
96	PCBs	PCB 114	WB	3	3	0.025	0.031	0.029	0.0033
96	PCBs	PCB 118	FS	3	3	0.75	0.84	0.79	0.047
96	PCBs	PCB 118	WB	3	3	0.69	0.80	0.76	0.060
96	PCBs	PCB 123	FS	3	3	0.0075	0.013	0.010	0.0026
96	PCBs	PCB 123	WB	3	3	0.0065	0.012	0.010	0.0033
96	PCBs	PCB 126	FS	3	3	0.0052	0.0065	0.0059	0.00095
96	PCBs	PCB 126	WB	3	3	0.0059	0.0066	0.0061	0.00042
96	PCBs	PCB 156	FS	3	3	0.069	0.086	0.077	0.0087
96	PCBs	PCB 156	WB	3	3	0.067	0.081	0.076	0.0077
96	PCBs	PCB 157	FS	3	3	0.017	0.023	0.020	0.0030
96	PCBs	PCB 157	WB	3	3	0.019	0.022	0.021	0.0016
96	PCBs	PCB 167	FS	3	3	0.044	0.050	0.046	0.0032
96	PCBs	PCB 167	WB	3	3	0.042	0.049	0.047	0.0036
96	PCBs	PCB 169	FS	3	1	0.00062	0.0012	0.00055	0.00022
96	PCBs	PCB 169	WB	3	0	0.0010	0.0011	0.00051	0.00020
96	PCBs	PCB 170	FS	3	3	0.13	0.17	0.15	0.020
96	PCBs	PCB 170	WB	3	3	0.14	0.16	0.15	0.0085
96	PCBs	PCB 180	FS	3	3	0.38	0.45	0.41	0.035
96	PCBs	PCB 180	WB	3	3	0.37	0.42	0.40	0.026
96	PCBs	PCB 189	FS	3	3	0.0052	0.0086	0.0065	0.0018
96	PCBs	PCB 189	WB	3	3	0.0056	0.0065	0.0061	0.00047

Appendix D-1: Site Summary Statistics
Steelhead

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
96	Pesticides	Aldrin	FS	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Aldrin	WB	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Alpha-BHC	FS	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Alpha-BHC	WB	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Alpha-Chlordane	FS	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Alpha-Chlordane	WB	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Beta-BHC	FS	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Beta-BHC	WB	3	0	1.9	2.1	1.0	0.050
96	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.9	2.1	1.0	0.050
96	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	1	1.9	2.1	1.3	0.51
96	Pesticides	cis-Nonachlor	FS	3	3	2.0	2.3	2.2	0.15
96	Pesticides	cis-Nonachlor	WB	3	3	1.8	2.5	2.2	0.38
96	Pesticides	DDD-o,p'	FS	3	0	1.9	2.1	1.0	0.050
96	Pesticides	DDD-o,p'	WB	3	0	1.9	2.1	1.0	0.050
96	Pesticides	DDE-o,p'	FS	3	3	1.3	1.9	1.5	0.35
96	Pesticides	DDE-o,p'	WB	3	3	1.4	1.9	1.6	0.25
96	Pesticides	DDT-o,p'	FS	3	0	1.9	2.1	1.0	0.050
96	Pesticides	DDT-o,p'	WB	3	0	1.9	2.1	1.0	0.050
96	Pesticides	DDD-p,p'	FS	3	3	3.3	5.5	4.5	1.1
96	Pesticides	DDD-p,p'	WB	3	3	4.7	6.6	5.8	0.97
96	Pesticides	DDE-p,p'	FS	3	3	12	16	14	2.2
96	Pesticides	DDE-p,p'	WB	3	3	17	17	17	0.00
96	Pesticides	DDT-p,p'	FS	3	3	3.8	4.7	4.2	0.46
96	Pesticides	DDT-p,p'	WB	3	3	4.2	5.0	4.6	0.40
96	Pesticides	DDMU	FS	3	3	1.4	1.8	1.4	0.11
96	Pesticides	DDMU	WB	3	2	1.6	1.9	1.4	0.41
96	Pesticides	Delta-BHC	FS	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Delta-BHC	WB	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Endosulfan Sulfate	FS	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Endosulfan Sulfate	WB	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Gamma-Chlordane	WB	3	0	1.9	2.1	1.0	0.050
96	Pesticides	gamma-Chlordane	FS	3	0	1.9	2.1	1.0	0.050
96	Pesticides	gamma-Chlordane	WB	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Heptachlor	FS	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Heptachlor	WB	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Heptachlor Epoxide	FS	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Hexachlorobenzene	FS	3	3	2.1	2.8	2.4	0.38
96	Pesticides	Hexachlorobenzene	WB	3	3	2.8	2.9	2.9	0.058
96	Pesticides	Lindane	FS	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Lindane	WB	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Mirex	FS	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Mirex	WB	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Oxychlordane	FS	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Oxychlordane	WB	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Pentachloroanisol	FS	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Pentachloroanisol	WB	3	0	1.9	2.1	1.0	0.050
96	Pesticides	Toxaphene	FS	3	0	57	63	30	1.4
96	Pesticides	Toxaphene	WB	3	0	58	62	30	1.0
96	Pesticides	trans-Nonachlor	FS	3	3	2.5	3.1	2.8	0.31
96	Pesticides	trans-Nonachlor	WB	3	3	3.1	3.3	3.2	0.10
96	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	24	24	12	0.15
96	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	24	24	12	0.15
96	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	9.3	48	11	11
96	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	47	49	24	0.30
96	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	19	97	23	22
96	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	95	97	48	0.60
96	Semivolatiles	2-Chloronaphthalene	FS	3	0	9.3	48	11	11
96	Semivolatiles	2-Chloronaphthalene	WB	3	0	47	49	24	0.30
96	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	24	24	12	0.15
96	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	24	24	12	0.15
96	Semivolatiles	Acenaphthene	FS	3	0	9.3	48	11	11
96	Semivolatiles	Acenaphthene	WB	3	0	47	49	24	0.30
96	Semivolatiles	Acenaphthylene	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	Acenaphthylene	WB	3	0	24	24	12	0.15
96	Semivolatiles	Anthracene	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	Anthracene	WB	3	0	24	24	12	0.15
96	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	24	24	12	0.15
96	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	24	24	12	0.15

Appendix D-1: Site Summary Statistics
Steelhead

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
96	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	24	24	12	0.15
96	Semivolatiles	Benzo(a)anthracene	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	Benzo(a)anthracene	WB	3	0	24	24	12	0.15
96	Semivolatiles	Benzo(a)pyrene	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	Benzo(a)pyrene	WB	3	0	24	24	12	0.15
96	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	9.3	48	11	11
96	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	47	49	24	0.30
96	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	24	24	12	0.15
96	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	24	24	12	0.15
96	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	9.3	48	11	11
96	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	47	49	24	0.30
96	Semivolatiles	Chrysene	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	Chrysene	WB	3	0	24	24	12	0.15
96	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	9.3	48	11	11
96	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	47	49	24	0.30
96	Semivolatiles	Dibenzofuran	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	Dibenzofuran	WB	3	0	24	24	12	0.15
96	Semivolatiles	Fluoranthene	FS	3	0	9.3	48	11	11
96	Semivolatiles	Fluoranthene	WB	3	0	47	49	24	0.30
96	Semivolatiles	9H-Fluorene	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	9H-Fluorene	WB	3	0	24	24	12	0.15
96	Semivolatiles	Hexachlorobutadiene	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	Hexachlorobutadiene	WB	3	0	24	24	12	0.15
96	Semivolatiles	Hexachloroethane	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	Hexachloroethane	WB	3	0	24	24	12	0.15
96	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	9.3	48	11	11
96	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	47	49	24	0.30
96	Semivolatiles	Naphthalene	FS	3	0	22	35	14	3.4
96	Semivolatiles	Naphthalene	WB	3	0	36	36	18	0.18
96	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	24	24	12	0.15
96	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	6.0	24	6.3	5.0
96	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	24	24	12	0.15
96	Semivolatiles	Nitrobenzene	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	Nitrobenzene	WB	3	0	24	24	12	0.15
96	Semivolatiles	Phenanthrene	FS	3	0	4.6	24	5.7	5.6
96	Semivolatiles	Phenanthrene	WB	3	0	24	24	12	0.15
96	Semivolatiles	Pyrene	FS	3	0	9.3	48	11	11
96	Semivolatiles	Pyrene	WB	3	0	47	49	24	0.30
96	Semivolatiles	Retene	FS	3	0	9.3	48	11	11
96	Semivolatiles	Retene	WB	3	0	47	49	24	0.30

Appendix D-1: Site Summary Statistics
Eulachon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
3	Dioxin/furans	2,3,7,8-TCDD	WB	3	2	0.000050	0.00010	0.000068	0.000039
3	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.00021	0.00028	0.00024	0.000036
3	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	1	0.000010	0.00017	0.000075	0.000085
3	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.00010	0.00026	0.00018	0.00011
3	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.00010	0.00017	0.00011	0.000060
3	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00040	0.00060	0.00049	0.00010
3	Dioxin/furans	OCDD	WB	3	3	0.0013	0.0017	0.0015	0.00023
3	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00058	0.00078	0.00067	0.00010
3	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.000080	0.00015	0.00011	0.000036
3	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00010	0.00015	0.00013	0.000026
3	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	2	0.000030	0.000090	0.000055	0.000031
3	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	2	0.000050	0.00010	0.000065	0.000030
3	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	3	0.000070	0.00020	0.00014	0.000066
3	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00015	0.00021	0.00019	0.000032
3	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000010	0.00026	0.00017	0.00014
3	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	2	0.000020	0.00011	0.000058	0.000046
3	Dioxin/furans	OCDF	WB	3	3	0.00010	0.00027	0.00021	0.000095
3	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	740	830	390	25
3	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	740	830	390	25
3	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	740	830	390	25
3	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	740	830	390	25
3	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	740	830	390	25
3	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	290	330	150	9.9
3	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	740	830	390	25
3	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	290	330	150	9.9
3	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	290	330	150	9.9
3	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	290	330	150	9.9
3	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	290	330	150	9.9
3	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	740	830	390	25
3	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	290	330	150	9.9
3	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	290	330	150	9.9
3	Guaiacols/Phenols	Phenol	WB	3	0	290	330	150	9.9
3	Metals	Aluminum	WB	3	1	6,500	20,000	8,800	2,000
3	Metals	Antimony	WB	3	0	50	50	25	0.00
3	Metals	Arsenic	WB	3	3	860	930	890	32
3	Metals	Barium	WB	3	1	200	350	180	140
3	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
3	Metals	Cadmium	WB	3	3	8.5	10	9.2	0.75
3	Metals	Chromium	WB	3	0	100	100	50	0.00
3	Metals	Cobalt	WB	3	3	6.3	7.9	7.1	0.80
3	Metals	Copper	WB	3	3	920	970	940	26
3	Metals	Lead	WB	3	3	370	680	500	160
3	Metals	Manganese	WB	3	3	480	520	500	22
3	Metals	Mercury	WB	3	0	35	42	19	1.8
3	Metals	Nickel	WB	3	3	34	67	50	17
3	Metals	Selenium	WB	3	3	270	300	290	15
3	Metals	Silver	WB	3	0	100	100	50	0.00
3	Metals	Thallium	WB	3	0	50	50	25	0.00
3	Metals	Vanadium	WB	3	2	20	22	17	6.4
3	Metals	Zinc	WB	3	3	13,000	14,000	14,000	900
3	PCBs	Aroclor 1016	WB	3	0	37	38	19	0.29
3	PCBs	Aroclor 1221	WB	3	0	37	38	19	0.29
3	PCBs	Aroclor 1232	WB	3	0	37	38	19	0.29
3	PCBs	Aroclor 1242	WB	3	0	37	38	19	0.29
3	PCBs	Aroclor 1248	WB	3	0	37	38	19	0.29
3	PCBs	Aroclor 1254	WB	3	0	37	38	19	0.29
3	PCBs	Aroclor 1260	WB	3	0	37	38	19	0.29
3	PCBs	PCB 77	WB	3	3	0.0081	0.0083	0.0082	0.00012
3	PCBs	PCB 105	WB	3	3	0.15	0.15	0.15	0.0026
3	PCBs	PCB 114	WB	3	3	0.010	0.011	0.011	0.00051
3	PCBs	PCB 118	WB	3	3	0.28	0.29	0.29	0.0032
3	PCBs	PCB 123	WB	3	3	0.010	0.012	0.011	0.00087
3	PCBs	PCB 126	WB	3	0	0.0017	0.0021	0.00095	0.00012
3	PCBs	PCB 156	WB	3	3	0.028	0.030	0.029	0.0013
3	PCBs	PCB 157	WB	3	3	0.0081	0.0095	0.0087	0.00068
3	PCBs	PCB 167	WB	3	3	0.017	0.018	0.018	0.00068
3	PCBs	PCB 169	WB	3	0	0.00050	0.00055	0.00026	0.000014
3	PCBs	PCB 170	WB	3	3	0.058	0.064	0.062	0.0034
3	PCBs	PCB 180	WB	3	3	0.17	0.18	0.18	0.0074
3	PCBs	PCB 189	WB	3	3	0.0023	0.0025	0.0024	0.000075
3	Pesticides	Aldrin	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	Alpha-BHC	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	Alpha-Chlordane	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	Beta-BHC	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	cis-Nonachlor	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	DDD-o,p'	WB	3	0	3.7	3.8	1.9	0.029

Appendix D-1: Site Summary Statistics
Eulachon

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
3	Pesticides	DDE-o,p'	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	DDT-o,p'	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	DDD-p,p'	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	DDE-p,p'	WB	3	3	9.8	11	11	0.69
3	Pesticides	DDT-p,p'	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	DDMU	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	Delta-BHC	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	Endosulfan Sulfate	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	Gamma-Chlordane	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	Gamma-Chlordene	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	Heptachlor	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	Heptachlor Epoxide	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	Hexachlorobenzene	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	Lindane	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	Mirex	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	Oxychlordane	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	Pentachloroanisol	WB	3	0	3.7	3.8	1.9	0.029
3	Pesticides	Toxaphene	WB	3	0	110	110	55	0.00
3	Pesticides	trans-Nonachlor	WB	3	0	3.7	3.8	1.9	0.029
3	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	7.3	8.3	3.9	0.26
3	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	150	170	77	5.1
3	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	290	330	150	9.9
3	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	590	660	310	20
3	Semivolatiles	2-Chloronaphthalene	WB	3	0	150	170	77	5.1
3	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	150	170	77	5.1
3	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	150	170	77	5.1
3	Semivolatiles	Acenaphthene	WB	3	0	290	330	150	9.9
3	Semivolatiles	Acenaphthylene	WB	3	0	150	170	77	5.1
3	Semivolatiles	Anthracene	WB	3	0	150	170	77	5.1
3	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	7.3	8.3	3.9	0.26
3	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	7.3	8.3	3.9	0.26
3	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	7.3	8.3	3.9	0.26
3	Semivolatiles	Benzo(a)anthracene	WB	3	0	150	170	77	5.1
3	Semivolatiles	Benzo(a)pyrene	WB	3	0	150	170	77	5.1
3	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	290	330	150	9.9
3	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	290	330	150	9.9
3	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	290	330	150	9.9
3	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	15	17	7.7	0.51
3	Semivolatiles	Chrysene	WB	3	0	150	170	77	5.1
3	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	290	330	150	9.9
3	Semivolatiles	Dibenzofuran	WB	3	0	150	170	77	5.1
3	Semivolatiles	Fluoranthene	WB	3	0	150	330	130	49
3	Semivolatiles	9H-Fluorene	WB	3	1	9.4	170	56	40
3	Semivolatiles	Hexachlorobutadiene	WB	3	0	7.3	8.3	3.9	0.26
3	Semivolatiles	Hexachloroethane	WB	3	0	7.3	8.3	3.9	0.26
3	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	290	330	150	9.9
3	Semivolatiles	Naphthalene	WB	3	0	30	40	18	2.5
3	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	7.3	8.3	3.9	0.26
3	Semivolatiles	Naphthalene, 2-methyl-	WB	3	1	7.8	11	6.4	4.0
3	Semivolatiles	Nitrobenzene	WB	3	0	7.5	17	5.5	2.6
3	Semivolatiles	Phenanthrene	WB	3	1	21	170	60	34
3	Semivolatiles	Pyrene	WB	3	0	290	330	150	9.9
3	Semivolatiles	Retene	WB	3	0	290	330	150	9.9

Appendix D-1: Site Summary Statistics
Pacific Lamprey

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
21	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000010	0.000060	0.000027	0.000029
21	Dioxin/furans	2,3,7,8-TCDD	WB	6	2	0.000020	0.000070	0.000028	0.000026
21	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000040	0.00017	0.00011	0.000078
21	Dioxin/furans	1,2,3,7,8-PeCDD	WB	6	5	0.000030	0.00015	0.00011	0.000055
21	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	2	0.000040	0.00011	0.000077	0.000049
21	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	6	4	0.000010	0.00013	0.000067	0.000053
21	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.00016	0.00021	0.00018	0.000026
21	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	6	4	0.000020	0.00018	0.00012	0.000082
21	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000040	0.000070	0.000047	0.000025
21	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	6	4	0.000010	0.000060	0.000038	0.000025
21	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.00010	0.00028	0.00019	0.00013
21	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	6	6	0.00021	0.00025	0.00023	0.000017
21	Dioxin/furans	OCDD	FS	3	3	0.00030	0.00043	0.00037	0.000066
21	Dioxin/furans	OCDD	WB	6	5	0.000020	0.00040	0.00029	0.00014
21	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.0012	0.0017	0.0014	0.00027
21	Dioxin/furans	2,3,7,8-TCDF	WB	6	6	0.0011	0.0017	0.0015	0.00021
21	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	1	0.000020	0.00032	0.00012	0.00018
21	Dioxin/furans	1,2,3,7,8-PeCDF	WB	6	6	0.00018	0.00032	0.00026	0.000053
21	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00010	0.00013	0.00011	0.000015
21	Dioxin/furans	2,3,4,7,8-PeCDF	WB	6	4	0.000010	0.00013	0.000087	0.000053
21	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	2	0.000010	0.00012	0.000082	0.000066
21	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	6	5	0.000010	0.00013	0.000083	0.000043
21	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000080	0.00010	0.000087	0.000012
21	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	6	4	0.000010	0.00012	0.000074	0.000054
21	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	2	0.000040	0.000060	0.000043	0.000021
21	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	6	4	0.000020	0.000060	0.000044	0.000025
21	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	3	0.000080	0.00020	0.00016	0.000069
21	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	6	3	0.000010	0.00019	0.000097	0.000095
21	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000010	0.000070	0.000017	0.000016
21	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	6	2	0.000010	0.000090	0.000041	0.000039
21	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000070	0.000017	0.000016
21	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	6	2	0.000010	0.000060	0.000016	0.0000092
21	Dioxin/furans	OCDF	FS	3	0	0.000020	0.00011	0.000027	0.000025
21	Dioxin/furans	OCDF	WB	6	3	0.000020	0.000090	0.000028	0.000012
21	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	2,400	2,500	1,200	18
21	Guaiacols/Phenols	4-Chloroguaiacol	WB	6	0	500	2,500	740	410
21	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	2,400	2,500	1,200	18
21	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	6	0	500	2,500	740	410
21	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	2,400	2,500	1,200	18
21	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	6	0	500	2,500	740	410
21	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	2,400	2,500	1,200	18
21	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	6	0	500	2,500	740	410
21	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	2,400	2,500	1,200	18
21	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	6	0	500	2,500	740	410
21	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	970	1,000	490	7.3
21	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	6	0	200	1,000	300	160
21	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	2,400	2,500	1,200	18
21	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	6	0	500	2,500	740	410
21	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	970	1,000	490	7.3
21	Guaiacols/Phenols	Tetrachloroguaiacol	WB	6	0	200	1,000	300	160
21	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	970	1,000	490	7.3
21	Guaiacols/Phenols	2-Chlorophenol	WB	6	0	200	1,000	300	160
21	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	970	1,000	490	7.3
21	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	6	0	200	1,000	300	160
21	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	970	1,000	490	7.3
21	Guaiacols/Phenols	2,4-Dichlorophenol	WB	6	0	200	1,000	300	160
21	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	2,400	2,500	1,200	18
21	Guaiacols/Phenols	2,4-Dimethylphenol	WB	6	0	500	2,500	740	410
21	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	970	1,000	490	7.3
21	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	200	1,000	370	230
21	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	970	1,000	490	7.3
21	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	6	0	200	1,000	300	160
21	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	970	1,000	490	7.3
21	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	200	1,000	370	230
21	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	970	1,000	490	7.3
21	Guaiacols/Phenols	Pentachlorophenol	WB	6	0	200	1,000	300	160
21	Guaiacols/Phenols	Phenol	FS	3	0	970	1,000	490	7.3
21	Guaiacols/Phenols	Phenol	WB	6	0	200	1,000	300	160
21	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
21	Metals	Aluminum	WB	6	3	1,000	2,200	1,300	850
21	Metals	Antimony	FS	3	0	50	50	25	0.00
21	Metals	Antimony	WB	6	0	50	50	25	0.00
21	Metals	Arsenic	FS	3	3	280	360	310	42
21	Metals	Arsenic	WB	6	6	260	370	310	41
21	Metals	Barium	FS	3	0	200	200	100	0.00
21	Metals	Barium	WB	6	0	200	200	100	0.00

Appendix D-1: Site Summary Statistics
Pacific Lamprey

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
21	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
21	Metals	Beryllium	WB	6	0	4.0	4.0	2.0	0.00
21	Metals	Cadmium	FS	3	3	16	30	24	7.1
21	Metals	Cadmium	WB	6	6	120	150	140	15
21	Metals	Chromium	FS	3	1	100	140	80	52
21	Metals	Chromium	WB	6	2	100	290	98	96
21	Metals	Cobalt	FS	3	3	10	79	33	40
21	Metals	Cobalt	WB	6	6	13	390	110	150
21	Metals	Copper	FS	3	3	1,100	1,400	1,200	140
21	Metals	Copper	WB	6	6	3,700	5,500	4,300	670
21	Metals	Lead	FS	3	0	10	10	5.0	0.00
21	Metals	Lead	WB	6	0	10	10	5.0	0.00
21	Metals	Manganese	FS	3	3	370	390	380	13
21	Metals	Manganese	WB	6	6	410	540	460	46
21	Metals	Mercury	FS	3	0	110	110	54	1.7
21	Metals	Mercury	WB	6	4	91	110	86	27
21	Metals	Nickel	FS	3	0	30	30	15	0.00
21	Metals	Nickel	WB	6	1	30	31	18	6.5
21	Metals	Selenium	FS	3	3	410	450	430	20
21	Metals	Selenium	WB	6	6	530	760	600	80
21	Metals	Silver	FS	3	0	100	100	50	0.00
21	Metals	Silver	WB	6	0	100	100	50	0.00
21	Metals	Thallium	FS	3	0	50	50	25	0.00
21	Metals	Thallium	WB	6	0	50	50	25	0.00
21	Metals	Vanadium	FS	3	2	10	12	9.7	4.0
21	Metals	Vanadium	WB	6	6	34	44	39	3.3
21	Metals	Zinc	FS	3	3	19,000	21,000	20,000	1,100
21	Metals	Zinc	WB	6	6	18,000	27,000	21,000	3,300
21	PCBs	Aroclor 1016	FS	3	0	19	20	9.7	0.29
21	PCBs	Aroclor 1016	WB	6	0	19	29	11	2.0
21	PCBs	Aroclor 1221	FS	3	0	19	20	9.7	0.29
21	PCBs	Aroclor 1221	WB	6	0	19	29	11	2.0
21	PCBs	Aroclor 1232	FS	3	0	19	20	9.7	0.29
21	PCBs	Aroclor 1232	WB	6	0	19	29	11	2.0
21	PCBs	Aroclor 1242	FS	3	0	19	20	9.7	0.29
21	PCBs	Aroclor 1242	WB	6	0	19	29	11	2.0
21	PCBs	Aroclor 1248	FS	3	0	19	20	9.7	0.29
21	PCBs	Aroclor 1248	WB	6	0	19	29	11	2.0
21	PCBs	Aroclor 1254	FS	3	3	80	100	87	11
21	PCBs	Aroclor 1254	WB	6	6	60	94	73	12
21	PCBs	Aroclor 1260	FS	3	0	19	20	9.7	0.29
21	PCBs	Aroclor 1260	WB	6	3	13	20	12	2.5
21	PCBs	PCB 77	FS	3	3	0.022	0.024	0.023	0.00085
21	PCBs	PCB 77	WB	6	6	0.018	0.029	0.024	0.0045
21	PCBs	PCB 105	FS	3	3	1.1	1.4	1.2	0.13
21	PCBs	PCB 105	WB	6	6	0.81	1.1	0.92	0.10
21	PCBs	PCB 114	FS	3	3	0.13	0.15	0.14	0.0075
21	PCBs	PCB 114	WB	6	6	0.10	0.14	0.12	0.016
21	PCBs	PCB 118	FS	3	3	3.4	3.8	3.6	0.21
21	PCBs	PCB 118	WB	6	6	2.4	3.3	2.8	0.39
21	PCBs	PCB 123	FS	3	3	0.047	0.070	0.058	0.012
21	PCBs	PCB 123	WB	6	6	0.033	0.048	0.040	0.0063
21	PCBs	PCB 126	FS	3	3	0.014	0.019	0.016	0.0027
21	PCBs	PCB 126	WB	6	6	0.011	0.031	0.020	0.0090
21	PCBs	PCB 156	FS	3	3	0.26	0.30	0.27	0.022
21	PCBs	PCB 156	WB	6	6	0.20	0.31	0.27	0.045
21	PCBs	PCB 157	FS	3	3	0.045	0.057	0.051	0.0059
21	PCBs	PCB 157	WB	6	3	0.0020	0.046	0.021	0.022
21	PCBs	PCB 167	FS	3	3	0.16	0.17	0.17	0.0040
21	PCBs	PCB 167	WB	6	6	0.13	0.19	0.16	0.026
21	PCBs	PCB 169	FS	3	0	0.0010	0.0010	0.00050	0.00
21	PCBs	PCB 169	WB	6	0	0.0010	0.0100	0.0017	0.0019
21	PCBs	PCB 170	FS	3	3	0.42	0.48	0.46	0.036
21	PCBs	PCB 170	WB	6	6	0.26	0.44	0.33	0.065
21	PCBs	PCB 180	FS	3	3	1.5	1.7	1.6	0.070
21	PCBs	PCB 180	WB	6	6	0.90	1.7	1.2	0.28
21	PCBs	PCB 189	FS	3	3	0.019	0.020	0.020	0.00045
21	PCBs	PCB 189	WB	6	6	0.014	0.021	0.018	0.0032
21	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.97	0.029
21	Pesticides	Aldrin	WB	6	0	1.9	3.6	1.3	0.37
21	Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.97	0.029
21	Pesticides	Alpha-BHC	WB	6	0	1.9	3.6	1.3	0.37
21	Pesticides	Alpha-Chlordene	FS	3	0	1.9	2.0	0.97	0.029
21	Pesticides	Alpha-Chlordene	WB	6	0	1.9	3.6	1.3	0.37
21	Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.97	0.029
21	Pesticides	Beta-BHC	WB	6	0	1.9	3.6	1.3	0.37

Appendix D-1: Site Summary Statistics
Pacific Lamprey

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
21	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	3	7.3	11	9.2	1.9
21	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	6	3	2.6	9.0	4.6	3.4
21	Pesticides	cis-Nonachlor	FS	3	3	8.5	11	9.7	1.3
21	Pesticides	cis-Nonachlor	WB	6	3	2.6	9.1	4.8	3.6
21	Pesticides	DDD-o,p'	FS	3	0	1.9	2.0	0.97	0.029
21	Pesticides	DDD-o,p'	WB	6	1	1.5	3.6	1.4	0.33
21	Pesticides	DDE-o,p'	FS	3	3	4.3	4.8	4.5	0.26
21	Pesticides	DDE-o,p'	WB	6	6	3.3	5.0	4.1	0.62
21	Pesticides	DDT-o,p'	FS	3	0	1.9	2.0	0.97	0.029
21	Pesticides	DDT-o,p'	WB	6	0	1.9	3.6	1.3	0.37
21	Pesticides	DDD-p,p'	FS	3	3	4.8	9.3	7.7	2.5
21	Pesticides	DDD-p,p'	WB	6	6	3.2	10	6.8	2.6
21	Pesticides	DDE-p,p'	FS	3	3	46	55	50	4.6
21	Pesticides	DDE-p,p'	WB	6	6	35	55	44	6.7
21	Pesticides	DDT-p,p'	FS	3	3	28	38	31	5.8
21	Pesticides	DDT-p,p'	WB	6	6	6.3	26	16	8.4
21	Pesticides	DDMU	FS	3	3	3.6	5.6	4.5	1.0
21	Pesticides	DDMU	WB	6	3	2.6	4.4	2.8	1.3
21	Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.97	0.029
21	Pesticides	Delta-BHC	WB	6	0	1.9	3.6	1.3	0.37
21	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	0.00	na
21	Pesticides	Endosulfan Sulfate	WB	6	0	0.00	3.6	1.6	0.26
21	Pesticides	Gamma-Chlordane	FS	3	2	1.3	2.5	1.6	0.79
21	Pesticides	Gamma-Chlordane	WB	6	1	1.5	3.6	1.4	0.33
21	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.0	0.97	0.029
21	Pesticides	Gamma-Chlordane	WB	6	0	1.9	3.6	1.3	0.37
21	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.97	0.029
21	Pesticides	Heptachlor	WB	6	0	1.9	3.6	1.3	0.37
21	Pesticides	Heptachlor Epoxide	FS	3	0	1.9	2.0	0.97	0.029
21	Pesticides	Heptachlor Epoxide	WB	6	0	1.9	3.6	1.3	0.37
21	Pesticides	Hexachlorobenzene	FS	3	3	7.1	8.0	7.6	0.46
21	Pesticides	Hexachlorobenzene	WB	6	3	2.6	7.8	4.3	3.1
21	Pesticides	Lindane	FS	3	0	1.9	2.0	0.97	0.029
21	Pesticides	Lindane	WB	6	0	1.9	3.6	1.3	0.37
21	Pesticides	Mirex	FS	3	0	1.9	2.0	0.97	0.029
21	Pesticides	Mirex	WB	6	0	1.9	3.6	1.3	0.37
21	Pesticides	Oxychlordane	FS	3	0	1.9	2.0	0.97	0.029
21	Pesticides	Oxychlordane	WB	6	0	1.9	3.6	1.3	0.37
21	Pesticides	Pentachloroanisol	FS	3	3	1.5	1.7	1.6	0.10
21	Pesticides	Pentachloroanisol	WB	6	3	1.1	3.6	1.4	0.27
21	Pesticides	Toxaphene	FS	3	0	57	60	29	0.87
21	Pesticides	Toxaphene	WB	5	0	56	110	36	11
21	Pesticides	trans-Nonachlor	FS	3	3	21	24	22	1.5
21	Pesticides	trans-Nonachlor	WB	6	3	2.6	20	9.8	9.1
21	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	24	25	12	0.20
21	Semivolatiles	1,2,4-Trichlorobenzene	WB	6	0	5.0	25	7.4	4.1
21	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	24	25	12	0.20
21	Semivolatiles	1,2-Diphenylhydrazine	WB	6	0	5.0	25	7.4	4.1
21	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	49	50	25	0.38
21	Semivolatiles	2,4-Dinitrotoluene	WB	6	0	10	50	15	8.2
21	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	97	100	49	0.73
21	Semivolatiles	2,6-Dinitrotoluene	WB	6	0	20	100	30	16
21	Semivolatiles	2-Chloronaphthalene	FS	3	0	49	50	25	0.38
21	Semivolatiles	2-Chloronaphthalene	WB	6	0	10	50	15	8.2
21	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	24	25	12	0.20
21	Semivolatiles	4-Bromophenyl-Phenylether	WB	6	0	5.0	25	7.4	4.1
21	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	24	25	12	0.20
21	Semivolatiles	4-Chlorophenyl-Phenylether	WB	6	0	5.0	25	7.4	4.1
21	Semivolatiles	Acenaphthene	FS	3	0	49	50	25	0.38
21	Semivolatiles	Acenaphthene	WB	6	0	10	50	15	8.2
21	Semivolatiles	Acenaphthylene	FS	3	0	24	25	12	0.20
21	Semivolatiles	Acenaphthylene	WB	6	0	5.0	25	7.4	4.1
21	Semivolatiles	Anthracene	FS	3	0	24	25	12	0.20
21	Semivolatiles	Anthracene	WB	6	0	5.0	25	7.4	4.1
21	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	24	25	12	0.20
21	Semivolatiles	Benzene, 1,2-dichloro-	WB	6	0	5.0	25	7.4	4.1
21	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	24	25	12	0.20
21	Semivolatiles	Benzene, 1,3-dichloro-	WB	6	0	5.0	25	7.4	4.1
21	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	24	25	12	0.20
21	Semivolatiles	Benzene, 1,4-dichloro-	WB	6	0	5.0	25	7.4	4.1
21	Semivolatiles	Benzo(a)anthracene	FS	3	0	24	25	12	0.20
21	Semivolatiles	Benzo(a)anthracene	WB	6	0	5.0	25	7.4	4.1
21	Semivolatiles	Benzo(a)pyrene	FS	3	0	24	25	12	0.20
21	Semivolatiles	Benzo(a)pyrene	WB	6	0	5.0	25	7.4	4.1
21	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	49	50	25	0.38
21	Semivolatiles	Benzo(g,h,i)perylene	WB	6	0	10	50	15	8.2

Appendix D-1: Site Summary Statistics
Pacific Lamprey

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
21	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	24	25	12	0.20
21	Semivolatiles	Benzo[b]Fluoranthene	WB	6	0	5.0	25	7.4	4.1
21	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	24	25	12	0.20
21	Semivolatiles	Benzo[k]fluoranthene	WB	6	0	5.0	25	7.4	4.1
21	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	49	50	25	0.38
21	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	6	0	10	50	15	8.2
21	Semivolatiles	Chrysene	FS	3	0	24	25	12	0.20
21	Semivolatiles	Chrysene	WB	6	0	5.0	25	7.4	4.1
21	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	49	50	25	0.38
21	Semivolatiles	Dibenz[a,h]anthracene	WB	6	0	10	50	15	8.2
21	Semivolatiles	Dibenzofuran	FS	3	0	24	25	12	0.20
21	Semivolatiles	Dibenzofuran	WB	6	0	5.0	25	7.4	4.1
21	Semivolatiles	Fluoranthene	FS	3	0	49	50	25	0.38
21	Semivolatiles	Fluoranthene	WB	6	0	10	50	15	8.2
21	Semivolatiles	9H-Fluorene	FS	3	0	24	25	12	0.20
21	Semivolatiles	9H-Fluorene	WB	6	0	5.0	25	7.4	4.1
21	Semivolatiles	Hexachlorobutadiene	FS	3	0	24	25	12	0.20
21	Semivolatiles	Hexachlorobutadiene	WB	6	0	5.0	25	7.4	4.1
21	Semivolatiles	Hexachloroethane	FS	3	0	24	25	12	0.20
21	Semivolatiles	Hexachloroethane	WB	6	0	5.0	25	7.4	4.1
21	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	49	50	25	0.38
21	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	6	0	10	50	15	8.2
21	Semivolatiles	Naphthalene	FS	3	0	54	85	33	8.2
21	Semivolatiles	Naphthalene	WB	6	0	23	59	20	6.2
21	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	24	26	13	0.38
21	Semivolatiles	Naphthalene, 1-methyl-	WB	6	4	13	25	15	2.9
21	Semivolatiles	Naphthalene, 2-methyl-	FS	3	1	49	77	42	30
21	Semivolatiles	Naphthalene, 2-methyl-	WB	6	4	31	44	31	8.5
21	Semivolatiles	Nitrobenzene	FS	3	0	24	25	12	0.20
21	Semivolatiles	Nitrobenzene	WB	6	0	5.0	25	7.4	4.1
21	Semivolatiles	Phenanthrene	FS	3	0	24	25	12	0.20
21	Semivolatiles	Phenanthrene	WB	6	2	7.3	25	10	4.3
21	Semivolatiles	Pyrene	FS	3	0	49	50	25	0.38
21	Semivolatiles	Pyrene	WB	6	0	10	50	15	8.2
21	Semivolatiles	Retene	FS	3	0	49	50	25	0.38
21	Semivolatiles	Retene	WB	6	0	10	50	15	8.2
24	Dioxin/furans	2,3,7,8-TCDD	WB	3	1	0.000030	0.000060	0.000032	0.000025
24	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.000020	0.000030	0.000012	0.0000029
24	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000020	0.000030	0.000012	0.0000029
24	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	3	0.000021	0.000025	0.000022	0.0000023
24	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	1	0.000020	0.000070	0.000030	0.000035
24	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.000024	0.000028	0.000026	0.0000021
24	Dioxin/furans	OCDD	WB	3	3	0.000053	0.000099	0.000072	0.000024
24	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.000029	0.000032	0.000030	0.000015
24	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.000041	0.000047	0.000044	0.0000031
24	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	1	0.000040	0.000016	0.000083	0.0000071
24	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	3	0.000014	0.000019	0.000016	0.0000025
24	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	3	0.000014	0.000016	0.000015	0.0000012
24	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000020	0.000070	0.000020	0.0000013
24	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.000010	0.000015	0.000012	0.0000029
24	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	3	0.000070	0.000010	0.000087	0.0000015
24	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	1	0.000010	0.000030	0.000015	0.0000013
24	Dioxin/furans	OCDF	WB	3	3	0.000070	0.000090	0.000083	0.0000012
24	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	960	4,500	1,100	1,000
24	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	960	4,500	1,100	1,000
24	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	960	4,500	1,100	1,000
24	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	960	4,500	1,100	1,000
24	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	960	4,500	1,100	1,000
24	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	380	1,800	430	400
24	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	960	4,500	1,100	1,000
24	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	380	1,800	430	400
24	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	380	1,800	430	400
24	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	380	1,800	430	400
24	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	380	1,800	430	400
24	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	960	4,500	1,100	1,000
24	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	380	1,800	430	400
24	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	380	1,800	430	400
24	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	380	1,800	430	400
24	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	380	1,800	430	400
24	Guaiacols/Phenols	Phenol	WB	3	0	380	1,800	430	400
24	Metals	Aluminum	WB	3	1	1,000	2,200	1,100	980
24	Metals	Antimony	WB	3	0	50	50	25	0.00
24	Metals	Arsenic	WB	3	3	150	170	160	10
24	Metals	Barium	WB	3	0	200	200	100	0.00
24	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
24	Metals	Cadmium	WB	3	3	56	75	66	9.5

Appendix D-1: Site Summary Statistics
Pacific Lamprey

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
24	Metals	Chromium	WB	3	2	100	150	110	51
24	Metals	Cobalt	WB	3	3	16	110	75	52
24	Metals	Copper	WB	3	3	4,500	5,400	5,000	470
24	Metals	Lead	WB	3	3	15	69	39	28
24	Metals	Manganese	WB	3	3	250	260	250	5.5
24	Metals	Mercury	WB	3	3	94	260	180	81
24	Metals	Nickel	WB	3	3	74	570	280	250
24	Metals	Selenium	WB	3	3	520	570	550	25
24	Metals	Silver	WB	3	0	100	100	50	0.00
24	Metals	Thallium	WB	3	0	50	50	25	0.00
24	Metals	Vanadium	WB	3	3	42	45	43	1.5
24	Metals	Zinc	WB	3	3	22,000	22,000	22,000	470
24	PCBs	Aroclor 1016	WB	3	0	19	20	9.8	0.29
24	PCBs	Aroclor 1221	WB	3	0	19	20	9.8	0.29
24	PCBs	Aroclor 1232	WB	3	0	19	20	9.8	0.29
24	PCBs	Aroclor 1242	WB	3	0	19	20	9.8	0.29
24	PCBs	Aroclor 1248	WB	3	0	19	20	9.8	0.29
24	PCBs	Aroclor 1254	WB	3	3	100	150	130	26
24	PCBs	Aroclor 1260	WB	3	0	19	20	9.8	0.29
24	PCBs	PCB 77	WB	3	3	0.031	0.037	0.034	0.0035
24	PCBs	PCB 105	WB	3	3	1.5	2.0	1.7	0.24
24	PCBs	PCB 114	WB	3	3	0.17	0.21	0.18	0.022
24	PCBs	PCB 118	WB	3	3	4.7	5.5	5.0	0.44
24	PCBs	PCB 123	WB	3	3	0.061	0.068	0.065	0.0037
24	PCBs	PCB 126	WB	3	3	0.023	0.029	0.025	0.0033
24	PCBs	PCB 156	WB	3	3	0.39	0.46	0.41	0.044
24	PCBs	PCB 157	WB	3	3	0.069	0.094	0.080	0.013
24	PCBs	PCB 167	WB	3	3	0.22	0.28	0.25	0.029
24	PCBs	PCB 169	WB	3	0	0.0012	0.0023	0.00093	0.00027
24	PCBs	PCB 170	WB	3	3	0.57	0.70	0.64	0.070
24	PCBs	PCB 180	WB	3	3	2.0	2.4	2.2	0.23
24	PCBs	PCB 189	WB	3	3	0.023	0.028	0.026	0.0027
24	Pesticides	Aldrin	WB	3	0	1.9	2.0	0.98	0.029
24	Pesticides	Alpha-BHC	WB	3	0	1.9	2.0	0.98	0.029
24	Pesticides	Alpha-Chlordene	WB	3	0	1.9	2.0	0.98	0.029
24	Pesticides	Beta-BHC	WB	3	0	1.9	2.0	0.98	0.029
24	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	3	3.6	18	12	7.3
24	Pesticides	cis-Nonachlor	WB	3	3	9.7	15	13	2.8
24	Pesticides	DDD-o,p'	WB	3	3	4.1	4.8	4.5	0.38
24	Pesticides	DDE-o,p'	WB	3	2	2.0	8.5	5.6	4.0
24	Pesticides	DDT-o,p'	WB	3	2	2.0	3.0	2.1	1.0
24	Pesticides	DDD-p,p'	WB	3	3	23	25	24	1.2
24	Pesticides	DDE-p,p'	WB	3	3	66	77	71	5.7
24	Pesticides	DDT-p,p'	WB	3	3	8.3	29	16	12
24	Pesticides	DDMU	WB	3	3	4.4	6.9	6.0	1.4
24	Pesticides	Delta-BHC	WB	3	0	1.9	2.0	0.98	0.029
24	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	0.00	na
24	Pesticides	Gamma-Chlordane	WB	3	3	2.4	3.1	2.8	0.36
24	Pesticides	Gamma-Chlordene	WB	3	0	1.9	2.0	0.98	0.029
24	Pesticides	Heptachlor	WB	3	0	1.9	2.0	0.98	0.029
24	Pesticides	Heptachlor Epoxide	WB	3	0	0.00	0.00	0.00	na
24	Pesticides	Hexachlorobenzene	WB	3	3	8.8	11	10	1.3
24	Pesticides	Lindane	WB	3	0	1.9	2.0	0.98	0.029
24	Pesticides	Mirex	WB	3	0	1.9	2.0	0.98	0.029
24	Pesticides	Oxychlordane	WB	3	3	4.6	5.7	5.1	0.55
24	Pesticides	Pentachloroanisol	WB	3	3	1.2	1.6	1.4	0.21
24	Pesticides	Toxaphene	WB	3	0	57	59	29	0.58
24	Pesticides	trans-Nonachlor	WB	3	3	18	25	22	3.8
24	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	9.1	9.8	4.8	0.18
24	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	9.1	9.8	4.8	0.18
24	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	18	20	9.5	0.36
24	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	37	39	19	0.69
24	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	20	9.5	0.36
24	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	9.1	9.8	4.8	0.18
24	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	9.1	9.8	4.8	0.18
24	Semivolatiles	Acenaphthene	WB	3	0	18	26	11	2.0
24	Semivolatiles	Acenaphthylene	WB	3	0	9.1	9.8	4.8	0.18
24	Semivolatiles	Anthracene	WB	3	0	9.1	9.8	4.8	0.18
24	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	9.1	9.8	4.8	0.18
24	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	9.1	9.8	4.8	0.18
24	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	9.1	9.8	4.8	0.18
24	Semivolatiles	Benzo(a)anthracene	WB	3	0	9.1	9.8	4.8	0.18
24	Semivolatiles	Benzo(a)pyrene	WB	3	0	9.1	49	11	11
24	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	98	23	23
24	Semivolatiles	Benzo[b]fluoranthene	WB	3	0	9.1	49	11	11
24	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	9.1	49	11	11

Appendix D-1: Site Summary Statistics
Pacific Lamprey

Site	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
24	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	20	9.5	0.36
24	Semivolatiles	Chrysene	WB	3	0	9.1	9.8	4.8	0.18
24	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	98	23	23
24	Semivolatiles	Dibenzofuran	WB	3	0	9.1	9.8	4.8	0.18
24	Semivolatiles	Fluoranthene	WB	3	1	17	19	12	4.3
24	Semivolatiles	9H-Fluorene	WB	3	0	9.1	9.8	4.8	0.18
24	Semivolatiles	Hexachlorobutadiene	WB	3	0	9.1	9.8	4.8	0.18
24	Semivolatiles	Hexachloroethane	WB	3	0	9.1	9.8	4.8	0.18
24	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	98	23	23
24	Semivolatiles	Naphthalene	WB	3	0	9.1	27	8.1	4.6
24	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	9.1	9.8	4.8	0.18
24	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	9.1	9.8	4.8	0.18
24	Semivolatiles	Nitrobenzene	WB	3	0	9.1	9.8	4.8	0.18
24	Semivolatiles	Phenanthrene	WB	3	1	9.1	15	8.2	6.1
24	Semivolatiles	Pyrene	WB	3	0	18	20	9.5	0.36
24	Semivolatiles	Retene	WB	3	0	18	20	9.5	0.36

Appendix D-2: Tributary Summary Statistics
Bridgelp Sucker

Watershed	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Dioxin/furans	2,3,7,8-TCDD	WB	3	3	0.000060	0.000080	0.000070	0.000010
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.00018	0.00018	0.00018	2.6E-12
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	3	0.00012	0.00013	0.00012	0.0000058
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	3	0.00014	0.00017	0.00015	0.000017
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	3	0.000050	0.000060	0.000053	0.0000058
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00036	0.00042	0.00040	0.000032
Yakima River	Dioxin/furans	OCDD	WB	3	3	0.00075	0.00098	0.00089	0.00013
Yakima River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00076	0.0011	0.00096	0.00018
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.000050	0.000060	0.000053	0.0000058
Yakima River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00011	0.00012	0.00012	0.0000058
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	3	0.000020	0.000020	0.000020	0.00
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	3	0.000030	0.000040	0.000033	0.0000058
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	3	0.000050	0.000060	0.000057	0.0000058
Yakima River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00013	0.00015	0.00014	0.000010
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000010	0.00012	0.000078	0.000064
Yakima River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
Yakima River	Dioxin/furans	OCDF	WB	3	3	0.000050	0.000080	0.000067	0.000015
Yakima River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	630	1,000	390	98
Yakima River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	630	1,000	390	98
Yakima River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	630	1,000	390	98
Yakima River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	630	1,000	390	98
Yakima River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	630	1,000	390	98
Yakima River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	250	400	160	39
Yakima River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	630	1,000	390	98
Yakima River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	250	400	160	39
Yakima River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	250	400	160	39
Yakima River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	250	400	160	39
Yakima River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	250	400	160	39
Yakima River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	630	1,000	390	98
Yakima River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	250	400	160	39
Yakima River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	250	400	160	39
Yakima River	Guaiacols/Phenols	Phenol	WB	3	0	250	400	160	39
Yakima River	Metals	Aluminum	WB	3	3	22,000	64,000	37,000	23,000
Yakima River	Metals	Antimony	WB	3	0	50	50	25	0.00
Yakima River	Metals	Arsenic	WB	3	3	260	300	280	21
Yakima River	Metals	Barium	WB	3	3	1,900	2,100	2,000	150
Yakima River	Metals	Beryllium	WB	3	2	4.0	8.0	5.3	3.1
Yakima River	Metals	Cadmium	WB	3	3	22	32	29	5.8
Yakima River	Metals	Chromium	WB	3	3	120	230	180	55
Yakima River	Metals	Cobalt	WB	3	3	86	120	96	17
Yakima River	Metals	Copper	WB	3	3	880	1,800	1,200	530
Yakima River	Metals	Lead	WB	3	3	37	78	54	22
Yakima River	Metals	Manganese	WB	3	3	17,000	20,000	18,000	1,700
Yakima River	Metals	Mercury	WB	3	1	40	53	32	19
Yakima River	Metals	Nickel	WB	3	3	270	600	400	180
Yakima River	Metals	Selenium	WB	3	3	280	280	280	0.00
Yakima River	Metals	Silver	WB	3	0	100	100	50	0.00
Yakima River	Metals	Thallium	WB	3	0	50	50	25	0.00
Yakima River	Metals	Vanadium	WB	3	3	140	270	190	66
Yakima River	Metals	Zinc	WB	3	3	20,000	21,000	20,000	500
Yakima River	PCBs	Aroclor 1016	WB	3	0	21	23	11	0.50
Yakima River	PCBs	Aroclor 1221	WB	3	0	21	23	11	0.50
Yakima River	PCBs	Aroclor 1232	WB	3	0	21	23	11	0.50
Yakima River	PCBs	Aroclor 1242	WB	3	0	21	23	11	0.50
Yakima River	PCBs	Aroclor 1248	WB	3	0	21	23	11	0.50
Yakima River	PCBs	Aroclor 1254	WB	3	3	18	32	25	7.0
Yakima River	PCBs	Aroclor 1260	WB	3	3	27	49	34	13
Yakima River	PCBs	PCB 77	WB	3	3	0.031	0.037	0.034	0.0028
Yakima River	PCBs	PCB 105	WB	3	3	0.53	0.59	0.57	0.030
Yakima River	PCBs	PCB 114	WB	3	3	0.043	0.050	0.047	0.0035
Yakima River	PCBs	PCB 118	WB	3	3	1.0	1.3	1.1	0.14
Yakima River	PCBs	PCB 123	WB	3	3	0.026	0.039	0.030	0.0072
Yakima River	PCBs	PCB 126	WB	3	1	0.0021	0.012	0.0048	0.0064
Yakima River	PCBs	PCB 156	WB	3	3	0.28	0.35	0.30	0.040
Yakima River	PCBs	PCB 157	WB	3	0	0.0044	0.0068	0.0028	0.00059
Yakima River	PCBs	PCB 167	WB	3	3	0.13	0.19	0.15	0.033
Yakima River	PCBs	PCB 169	WB	3	1	0.00073	0.0058	0.0022	0.0031
Yakima River	PCBs	PCB 170	WB	3	3	0.74	1.3	0.94	0.33
Yakima River	PCBs	PCB 180	WB	3	3	2.1	4.1	2.8	1.1
Yakima River	PCBs	PCB 189	WB	3	3	0.029	0.045	0.035	0.0086
Yakima River	Pesticides	Aldrin	WB	3	0	2.8	3.5	1.5	0.20
Yakima River	Pesticides	Alpha-BHC	WB	3	0	2.8	3.5	1.5	0.20
Yakima River	Pesticides	Alpha-Chlordane	WB	3	0	2.8	3.5	1.5	0.20
Yakima River	Pesticides	Beta-BHC	WB	3	0	2.8	3.5	1.5	0.20
Yakima River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	2.8	3.5	1.5	0.20
Yakima River	Pesticides	cis-Nonachlor	WB	3	0	2.8	3.5	1.5	0.20

Appendix D-2: Tributary Summary Statistics
Bridgelip Sucker

Watershed	Chemical Group	Chemical	Sample Type	of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Pesticides	DDD-o,p'	WB	3	3	8.7	11	9.9	1.2
Yakima River	Pesticides	DDE-o,p'	WB	3	3	5.9	7.9	6.8	1.0
Yakima River	Pesticides	DDT-o,p'	WB	3	0	2.8	3.5	1.5	0.20
Yakima River	Pesticides	DDD-p,p'	WB	3	3	52	72	65	11
Yakima River	Pesticides	DDE-p,p'	WB	3	3	310	560	400	140
Yakima River	Pesticides	DDT-p,p'	WB	3	3	37	52	46	8.1
Yakima River	Pesticides	DDMU	WB	3	3	10	21	16	5.5
Yakima River	Pesticides	Delta-BHC	WB	3	0	2.8	3.5	1.5	0.20
Yakima River	Pesticides	Endosulfan Sulfate	WB	3	3	3.5	5.4	4.6	1.0
Yakima River	Pesticides	Gamma-Chlordane	WB	3	0	2.8	3.5	1.5	0.20
Yakima River	Pesticides	Gamma-Chlordene	WB	3	0	2.8	3.5	1.5	0.20
Yakima River	Pesticides	Heptachlor	WB	3	0	2.8	3.5	1.5	0.20
Yakima River	Pesticides	Heptachlor Epoxide	WB	3	0	2.8	3.5	1.5	0.20
Yakima River	Pesticides	Hexachlorobenzene	WB	3	0	2.8	3.5	1.5	0.20
Yakima River	Pesticides	Lindane	WB	3	0	2.8	3.5	1.5	0.20
Yakima River	Pesticides	Mirex	WB	3	0	2.8	3.5	1.5	0.20
Yakima River	Pesticides	Oxychlordane	WB	3	0	2.8	3.5	1.5	0.20
Yakima River	Pesticides	Pentachloroanisole	WB	3	0	2.8	3.5	1.5	0.20
Yakima River	Pesticides	Toxaphene	WB	3	0	80	85	41	1.3
Yakima River	Pesticides	trans-Nonachlor	WB	3	0	2.8	3.5	1.5	0.20
Yakima River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	6.3	10	3.9	0.96
Yakima River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	1	6.3	14	6.9	6.1
Yakima River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	13	20	7.9	2.0
Yakima River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	25	40	16	3.9
Yakima River	Semivolatiles	2-Chloronaphthalene	WB	3	0	13	20	7.9	2.0
Yakima River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	6.3	10	3.9	0.96
Yakima River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	6.3	10	3.9	0.96
Yakima River	Semivolatiles	Acenaphthene	WB	3	0	13	20	7.9	2.0
Yakima River	Semivolatiles	Acenaphthylene	WB	3	0	6.3	10	3.9	0.96
Yakima River	Semivolatiles	Anthracene	WB	3	0	6.3	10	3.9	0.96
Yakima River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	6.3	10	3.9	0.96
Yakima River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	6.3	10	3.9	0.96
Yakima River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	6.3	10	3.9	0.96
Yakima River	Semivolatiles	Benzo(a)anthracene	WB	3	0	6.3	10	3.9	0.96
Yakima River	Semivolatiles	Benzo(a)pyrene	WB	3	0	6.3	10	3.9	0.96
Yakima River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	13	20	7.9	2.0
Yakima River	Semivolatiles	Benzo[b]fluoranthene	WB	3	0	6.3	10	3.9	0.96
Yakima River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	6.3	10	3.9	0.96
Yakima River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	13	20	7.9	2.0
Yakima River	Semivolatiles	Chrysene	WB	3	0	6.3	10	3.9	0.96
Yakima River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	13	20	7.9	2.0
Yakima River	Semivolatiles	Dibenzofuran	WB	3	0	6.3	10	3.9	0.96
Yakima River	Semivolatiles	Fluoranthene	WB	3	0	13	20	7.9	2.0
Yakima River	Semivolatiles	9H-Fluorene	WB	3	0	6.3	10	3.9	0.96
Yakima River	Semivolatiles	Hexachlorobutadiene	WB	3	0	6.3	10	3.9	0.96
Yakima River	Semivolatiles	Hexachloroethane	WB	3	0	6.3	10	3.9	0.96
Yakima River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	13	20	7.9	2.0
Yakima River	Semivolatiles	Naphthalene	WB	3	0	14	29	10	3.8
Yakima River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	1	6.3	10	5.2	2.2
Yakima River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	3	12	20	16	4.1
Yakima River	Semivolatiles	Nitrobenzene	WB	3	0	6.3	10	3.9	0.96
Yakima River	Semivolatiles	Phenanthrene	WB	3	0	6.3	10	3.9	0.96
Yakima River	Semivolatiles	Pyrene	WB	3	0	13	20	7.9	2.0
Yakima River	Semivolatiles	Retene	WB	3	0	13	20	7.9	2.0

Appendix D-2: Tributary Summary Statistics
Largescale Sucker

Tributary	Chemical Group	Chemical	Sample Type	Number	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
				of Samples					
Columbia River	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000010	0.000040	0.000018	0.000019
Columbia River	Dioxin/furans	2,3,7,8-TCDD	WB	5	4	0.000010	0.000021	0.00011	0.000086
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000010	0.000040	0.000022	0.000018
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	5	5	0.000040	0.000090	0.000062	0.000026
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000010	0.000020	0.0000083	0.0000029
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	5	2	0.000010	0.000030	0.000013	0.0000097
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	1	0.000020	0.000030	0.000017	0.000012
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	5	2	0.000010	0.000040	0.000021	0.000017
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000020	0.000050	0.000030	0.000020
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	5	1	0.000010	0.000030	0.000012	0.000010
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000010	0.00012	0.000058	0.000058
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	5	5	0.00011	0.00021	0.00015	0.000047
Columbia River	Dioxin/furans	OCDD	FS	3	3	0.00023	0.0020	0.00085	0.00096
Columbia River	Dioxin/furans	OCDD	WB	5	5	0.00045	0.0010	0.00070	0.00023
Columbia River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.0010	0.0015	0.0012	0.00022
Columbia River	Dioxin/furans	2,3,7,8-TCDF	WB	5	5	0.0014	0.0036	0.0025	0.00089
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	0	0.000010	0.000020	0.0000083	0.0000029
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	5	2	0.000020	0.000040	0.000022	0.000016
Columbia River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	2	0.000020	0.000050	0.000037	0.000023
Columbia River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	5	3	0.000020	0.00012	0.000064	0.000053
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	1	0.000010	0.000030	0.000013	0.000014
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	5	1	0.000010	0.000020	0.000010	0.0000061
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	5	1	0.000010	0.000020	0.0000080	0.0000027
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	1	0.000010	0.000020	0.000010	0.0000087
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	5	0	0.000010	0.000020	0.0000070	0.0000027
Columbia River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Columbia River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	5	1	0.000010	0.000020	0.0000080	0.0000027
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	1	0.000010	0.000060	0.000025	0.000030
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	5	3	0.000010	0.000060	0.000027	0.000022
Columbia River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000020	0.0000083	0.0000029
Columbia River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	5	0	0.000010	0.000020	0.0000070	0.0000027
Columbia River	Dioxin/furans	OCDF	FS	3	2	0.000020	0.00011	0.000067	0.000051
Columbia River	Dioxin/furans	OCDF	WB	5	2	0.000010	0.00011	0.000034	0.000045
Columbia River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	480	960	400	140
Columbia River	Guaiacols/Phenols	4-Chloroguaiacol	WB	5	0	860	990	470	26
Columbia River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	480	960	400	140
Columbia River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	5	0	860	990	470	26
Columbia River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	480	960	400	140
Columbia River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	5	0	860	990	470	26
Columbia River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	480	960	400	140
Columbia River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	5	0	860	990	470	26
Columbia River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	480	960	400	140
Columbia River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	5	0	860	990	470	26
Columbia River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	190	380	160	54
Columbia River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	5	0	340	400	190	10
Columbia River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	480	960	400	140
Columbia River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	5	0	860	990	470	26
Columbia River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	190	380	160	54
Columbia River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	5	0	340	400	190	10
Columbia River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	190	380	160	54
Columbia River	Guaiacols/Phenols	2-Chlorophenol	WB	5	0	340	400	190	10
Columbia River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	190	380	160	54
Columbia River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	5	0	340	400	190	10
Columbia River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	190	380	160	54
Columbia River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	5	0	340	400	190	10
Columbia River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	480	960	400	140
Columbia River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	5	0	860	990	470	26
Columbia River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	190	380	160	54
Columbia River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	5	0	340	400	190	10
Columbia River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	190	380	160	54
Columbia River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	5	0	340	400	190	10
Columbia River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	190	380	160	54
Columbia River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	5	0	340	400	190	10
Columbia River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	190	380	160	54
Columbia River	Guaiacols/Phenols	Pentachlorophenol	WB	5	0	340	400	190	10
Columbia River	Guaiacols/Phenols	Phenol	FS	3	0	190	380	160	54
Columbia River	Guaiacols/Phenols	Phenol	WB	5	0	340	400	190	10
Columbia River	Metals	Aluminum	FS	3	1	1,000	3,800	1,600	1,900
Columbia River	Metals	Aluminum	WB	5	5	85,000	190,000	130,000	44,000
Columbia River	Metals	Antimony	FS	3	0	50	50	25	0.00
Columbia River	Metals	Antimony	WB	5	0	50	51	25	0.22
Columbia River	Metals	Arsenic	FS	3	3	54	86	65	18
Columbia River	Metals	Arsenic	WB	5	5	200	320	260	55
Columbia River	Metals	Barium	FS	3	3	810	980	920	98
Columbia River	Metals	Barium	WB	5	5	3,000	4,700	3,900	720

Appendix D-2: Tributary Summary Statistics
Largescale Sucker

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples		Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Metals	Beryllium	FS	3		0	4.0	4.0	2.0	0.00
Columbia River	Metals	Beryllium	WB	5		4	4.0	8.6	5.9	2.8
Columbia River	Metals	Cadmium	FS	3		3	14	24	18	5.3
Columbia River	Metals	Cadmium	WB	5		5	95	250	170	69
Columbia River	Metals	Chromium	FS	3		3	360	380	370	12
Columbia River	Metals	Chromium	WB	5		5	500	600	530	39
Columbia River	Metals	Cobalt	FS	3		3	20	250	160	120
Columbia River	Metals	Cobalt	WB	5		5	170	270	220	36
Columbia River	Metals	Copper	FS	3		3	430	440	440	5.8
Columbia River	Metals	Copper	WB	5		5	920	5,600	2,100	2,000
Columbia River	Metals	Lead	FS	3		2	10	140	88	72
Columbia River	Metals	Lead	WB	5		5	170	1,100	520	360
Columbia River	Metals	Manganese	FS	3		3	3,700	5,400	4,500	820
Columbia River	Metals	Manganese	WB	5		5	9,800	21,000	16,000	4,900
Columbia River	Metals	Mercury	FS	3		3	150	220	190	35
Columbia River	Metals	Mercury	WB	5		4	85	210	120	59
Columbia River	Metals	Nickel	FS	3		2	30	510	300	260
Columbia River	Metals	Nickel	WB	5		5	450	11,000	3,600	4,100
Columbia River	Metals	Selenium	FS	3		3	250	300	280	26
Columbia River	Metals	Selenium	WB	5		3	330	500	310	62
Columbia River	Metals	Silver	FS	3		0	100	100	50	0.00
Columbia River	Metals	Silver	WB	5		0	100	100	50	0.00
Columbia River	Metals	Thallium	FS	3		0	50	50	25	0.00
Columbia River	Metals	Thallium	WB	5		0	50	51	25	0.22
Columbia River	Metals	Vanadium	FS	3		0	10	10	5.0	0.00
Columbia River	Metals	Vanadium	WB	5		5	320	610	440	120
Columbia River	Metals	Zinc	FS	3		3	24,000	26,000	25,000	1,200
Columbia River	Metals	Zinc	WB	5		5	16,000	38,000	28,000	11,000
Columbia River	PCBs	Aroclor 1016	FS	3		0	19	20	9.7	0.29
Columbia River	PCBs	Aroclor 1016	WB	5		0	19	20	9.7	0.27
Columbia River	PCBs	Aroclor 1221	FS	3		0	19	20	9.7	0.29
Columbia River	PCBs	Aroclor 1221	WB	5		0	19	20	9.7	0.27
Columbia River	PCBs	Aroclor 1232	FS	3		0	19	20	9.7	0.29
Columbia River	PCBs	Aroclor 1232	WB	5		0	19	20	9.7	0.27
Columbia River	PCBs	Aroclor 1242	FS	3		0	19	20	9.7	0.29
Columbia River	PCBs	Aroclor 1242	WB	5		0	19	20	9.7	0.27
Columbia River	PCBs	Aroclor 1248	FS	3		0	19	20	9.7	0.29
Columbia River	PCBs	Aroclor 1248	WB	5		0	19	20	9.7	0.27
Columbia River	PCBs	Aroclor 1254	FS	3		3	19	41	31	11
Columbia River	PCBs	Aroclor 1254	WB	5		5	28	65	40	15
Columbia River	PCBs	Aroclor 1260	FS	3		3	28	54	38	14
Columbia River	PCBs	Aroclor 1260	WB	5		5	21	100	55	41
Columbia River	PCBs	PCB 077	FS	3		3	0.032	0.042	0.035	0.0056
Columbia River	PCBs	PCB 077	WB	5		5	0.046	0.11	0.065	0.024
Columbia River	PCBs	PCB 105	FS	3		3	1.6	3.0	2.3	0.74
Columbia River	PCBs	PCB 105	WB	5		5	1.2	6.5	3.0	2.2
Columbia River	PCBs	PCB 114	FS	3		3	0.13	0.28	0.21	0.072
Columbia River	PCBs	PCB 114	WB	5		5	0.096	0.54	0.26	0.19
Columbia River	PCBs	PCB 118	FS	3		3	3.4	6.6	5.1	1.6
Columbia River	PCBs	PCB 118	WB	5		5	2.3	14	6.5	4.9
Columbia River	PCBs	PCB 123	FS	3		3	0.059	0.13	0.095	0.036
Columbia River	PCBs	PCB 123	WB	5		5	0.044	0.25	0.12	0.081
Columbia River	PCBs	PCB 126	FS	3		3	0.0070	0.013	0.0094	0.0030
Columbia River	PCBs	PCB 126	WB	5		3	0.00096	0.021	0.010	0.0091
Columbia River	PCBs	PCB 156	FS	3		3	0.71	1.4	1.1	0.33
Columbia River	PCBs	PCB 156	WB	5		5	0.44	2.7	1.3	0.94
Columbia River	PCBs	PCB 157	FS	3		3	0.14	0.27	0.21	0.068
Columbia River	PCBs	PCB 157	WB	5		5	0.089	0.53	0.25	0.18
Columbia River	PCBs	PCB 167	FS	3		3	0.28	0.60	0.45	0.16
Columbia River	PCBs	PCB 167	WB	5		5	0.19	1.2	0.56	0.42
Columbia River	PCBs	PCB 169	FS	3		0	0.0013	0.0024	0.00086	0.00031
Columbia River	PCBs	PCB 169	WB	5		0	0.0012	0.0023	0.00077	0.00022
Columbia River	PCBs	PCB 170	FS	3		3	1.00	2.5	1.8	0.76
Columbia River	PCBs	PCB 170	WB	5		5	0.88	5.2	2.6	2.0
Columbia River	PCBs	PCB 180	FS	3		3	3.2	7.7	5.5	2.2
Columbia River	PCBs	PCB 180	WB	5		5	2.7	17	7.5	6.1
Columbia River	PCBs	PCB 189	FS	3		3	0.061	0.11	0.089	0.026
Columbia River	PCBs	PCB 189	WB	5		5	0.030	0.20	0.10	0.081
Columbia River	Pesticides	Aldrin	FS	3		0	1.9	2.0	0.97	0.029
Columbia River	Pesticides	Aldrin	WB	5		0	1.9	2.0	0.97	0.027
Columbia River	Pesticides	Alpha-BHC	FS	3		0	1.9	2.0	0.97	0.029
Columbia River	Pesticides	Alpha-BHC	WB	5		0	1.9	2.0	0.97	0.027
Columbia River	Pesticides	Alpha-Chlordene	FS	3		0	1.9	2.0	0.97	0.029
Columbia River	Pesticides	Alpha-Chlordene	WB	5		0	1.9	2.0	0.97	0.027
Columbia River	Pesticides	Beta-BHC	FS	3		0	1.9	2.0	0.97	0.029
Columbia River	Pesticides	Beta-BHC	WB	5		0	1.9	2.0	0.97	0.027

Appendix D-2: Tributary Summary Statistics
Largescale Sucker

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples		Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3		0	1.9	2.0	0.97	0.029
Columbia River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	5		2	0.93	2.0	1.00	0.066
Columbia River	Pesticides	cis-Nonachlor	FS	3		0	1.9	2.0	0.97	0.029
Columbia River	Pesticides	cis-Nonachlor	WB	5		2	1.9	2.0	1.4	0.50
Columbia River	Pesticides	DDD-o,p'	FS	3		3	2.0	4.2	3.0	1.1
Columbia River	Pesticides	DDD-o,p'	WB	5		5	3.6	15	8.1	4.4
Columbia River	Pesticides	DDE-o,p'	FS	3		3	3.2	5.0	4.0	0.92
Columbia River	Pesticides	DDE-o,p'	WB	5		5	3.1	12	5.6	3.7
Columbia River	Pesticides	DDT-o,p'	FS	3		0	1.9	2.0	0.97	0.029
Columbia River	Pesticides	DDT-o,p'	WB	5		0	1.9	2.0	0.97	0.027
Columbia River	Pesticides	DDD-p,p'	FS	3		2	2.0	42	26	22
Columbia River	Pesticides	DDD-p,p'	WB	5		4	2.0	130	50	48
Columbia River	Pesticides	DDE-p,p'	FS	3		3	260	390	320	66
Columbia River	Pesticides	DDE-p,p'	WB	5		5	230	830	420	240
Columbia River	Pesticides	DDT-p,p'	FS	3		3	6.3	29	20	12
Columbia River	Pesticides	DDT-p,p'	WB	5		5	5.6	52	20	19
Columbia River	Pesticides	DDMU	FS	3		3	5.5	9.4	7.4	2.0
Columbia River	Pesticides	DDMU	WB	5		5	4.8	24	11	7.7
Columbia River	Pesticides	Delta-BHC	FS	3		0	1.9	2.0	0.97	0.029
Columbia River	Pesticides	Delta-BHC	WB	5		0	1.9	2.0	0.97	0.027
Columbia River	Pesticides	Endosulfan Sulfate	FS	3		0	0.00	0.00	0.00	na
Columbia River	Pesticides	Endosulfan Sulfate	WB	5		0	0.00	1.9	0.95	0.00
Columbia River	Pesticides	Gamma-Chlordane	FS	3		0	1.9	2.0	0.97	0.029
Columbia River	Pesticides	Gamma-Chlordane	WB	5		2	1.4	2.0	1.2	0.29
Columbia River	Pesticides	Gamma-Chlordene	FS	3		0	1.9	2.0	0.97	0.029
Columbia River	Pesticides	Gamma-Chlordene	WB	5		0	1.9	2.0	0.97	0.027
Columbia River	Pesticides	Heptachlor	FS	3		0	1.9	2.0	0.97	0.029
Columbia River	Pesticides	Heptachlor	WB	5		0	1.9	2.0	0.97	0.027
Columbia River	Pesticides	Heptachlor Epoxide	FS	3		0	0.00	1.9	0.95	na
Columbia River	Pesticides	Heptachlor Epoxide	WB	5		0	0.00	1.9	0.95	0.00
Columbia River	Pesticides	Hexachlorobenzene	FS	3		0	1.9	2.0	0.97	0.029
Columbia River	Pesticides	Hexachlorobenzene	WB	5		3	1.3	2.8	1.7	0.89
Columbia River	Pesticides	Lindane	FS	3		0	1.9	2.0	0.97	0.029
Columbia River	Pesticides	Lindane	WB	5		0	1.9	2.0	0.97	0.027
Columbia River	Pesticides	Mirex	FS	3		0	1.9	2.0	0.97	0.029
Columbia River	Pesticides	Mirex	WB	5		2	0.96	2.0	1.0	0.10
Columbia River	Pesticides	Oxychlordane	FS	3		0	1.9	2.0	0.97	0.029
Columbia River	Pesticides	Oxychlordane	WB	5		0	1.9	2.0	0.97	0.027
Columbia River	Pesticides	Pentachloroanisol	FS	3		0	1.9	2.0	0.97	0.029
Columbia River	Pesticides	Pentachloroanisol	WB	5		0	1.9	2.0	0.97	0.027
Columbia River	Pesticides	Toxaphene	FS	3		0	58	59	29	0.29
Columbia River	Pesticides	Toxaphene	WB	5		0	56	59	29	0.76
Columbia River	Pesticides	trans-Nonachlor	FS	3		0	1.9	2.0	0.97	0.029
Columbia River	Pesticides	trans-Nonachlor	WB	5		5	1.2	3.0	2.1	0.85
Columbia River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	1,2,4-Trichlorobenzene	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	1,2-Diphenylhydrazine	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	1,2-Diphenylhydrazine	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	2,4-Dinitrotoluene	FS	3		0	9.6	19	7.9	2.7
Columbia River	Semivolatiles	2,4-Dinitrotoluene	WB	5		0	17	20	9.3	0.53
Columbia River	Semivolatiles	2,6-Dinitrotoluene	FS	3		0	19	38	16	5.4
Columbia River	Semivolatiles	2,6-Dinitrotoluene	WB	5		0	34	40	19	1.0
Columbia River	Semivolatiles	2-Chloronaphthalene	FS	3		0	9.6	19	7.9	2.7
Columbia River	Semivolatiles	2-Chloronaphthalene	WB	5		0	17	20	9.3	0.53
Columbia River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	4-Bromophenyl-Phenylether	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	Acenaphthene	FS	3		0	9.6	19	7.9	2.7
Columbia River	Semivolatiles	Acenaphthene	WB	5		0	17	20	9.3	0.53
Columbia River	Semivolatiles	Acenaphthylene	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	Acenaphthylene	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	Anthracene	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	Anthracene	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	Benzene, 1,2-dichloro-	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	Benzene, 1,3-dichloro-	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	Benzene, 1,4-dichloro-	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	Benzo(a)anthracene	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	Benzo(a)anthracene	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	Benzo(a)pyrene	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	Benzo(a)pyrene	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	Benzo(g,h,i)perylene	FS	3		0	9.6	19	7.9	2.7
Columbia River	Semivolatiles	Benzo(g,h,i)perylene	WB	5		0	17	20	9.3	0.53

Appendix D-2: Tributary Summary Statistics
Largescale Sucker

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples		Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Semivolatiles	Benzo[b]Fluoranthene	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	Benzo[b]Fluoranthene	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	Benzo[k]fluoranthene	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	Benzo[k]fluoranthene	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3		0	0.00	19	9.5	0.14
Columbia River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	5		0	17	20	9.3	0.53
Columbia River	Semivolatiles	Chrysene	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	Chrysene	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	Dibenz[a,h]anthracene	FS	3		0	9.6	19	7.9	2.7
Columbia River	Semivolatiles	Dibenz[a,h]anthracene	WB	5		0	17	20	9.3	0.53
Columbia River	Semivolatiles	Dibenzofuran	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	Dibenzofuran	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	Fluoranthene	FS	3		0	9.6	19	7.9	2.7
Columbia River	Semivolatiles	Fluoranthene	WB	5		0	17	20	9.3	0.53
Columbia River	Semivolatiles	9H-Fluorene	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	9H-Fluorene	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	Hexachlorobutadiene	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	Hexachlorobutadiene	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	Hexachloroethane	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	Hexachloroethane	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3		0	9.6	19	7.9	2.7
Columbia River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	5		0	17	20	9.3	0.53
Columbia River	Semivolatiles	Naphthalene	FS	3		0	18	27	11	2.2
Columbia River	Semivolatiles	Naphthalene	WB	5		0	18	24	10	1.1
Columbia River	Semivolatiles	Naphthalene, 1-methyl-	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	Naphthalene, 1-methyl-	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	Naphthalene, 2-methyl-	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	Naphthalene, 2-methyl-	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	Nitrobenzene	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	Nitrobenzene	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	Phenanthrene	FS	3		0	4.8	9.6	4.0	1.4
Columbia River	Semivolatiles	Phenanthrene	WB	5		0	8.6	9.9	4.7	0.26
Columbia River	Semivolatiles	Pyrene	FS	3		0	9.6	19	7.9	2.7
Columbia River	Semivolatiles	Pyrene	WB	5		0	17	20	9.3	0.53
Columbia River	Semivolatiles	Retene	FS	3		0	9.6	19	7.9	2.7
Columbia River	Semivolatiles	Retene	WB	5		0	17	20	9.3	0.53
Deschutes River	Dioxin/furans	2,3,7,8-TCDD	FS	3		1	0.000010	0.000060	0.000022	0.000010
Deschutes River	Dioxin/furans	2,3,7,8-TCDD	WB	3		1	0.000020	0.000050	0.000023	0.000023
Deschutes River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3		1	0.000030	0.00015	0.000062	0.000077
Deschutes River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3		3	0.00014	0.00017	0.00016	0.000015
Deschutes River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3		1	0.000080	0.00012	0.000072	0.000043
Deschutes River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3		3	0.00011	0.00013	0.00012	0.000010
Deschutes River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3		1	0.000080	0.00011	0.000062	0.000026
Deschutes River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3		2	0.000030	0.00014	0.000085	0.000064
Deschutes River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3		1	0.000070	0.00011	0.000055	0.000015
Deschutes River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3		2	0.000030	0.000050	0.000038	0.000020
Deschutes River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3		2	0.00011	0.00015	0.00012	0.000052
Deschutes River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3		2	0.000020	0.00024	0.00015	0.00013
Deschutes River	Dioxin/furans	OCDD	FS	3		1	0.000010	0.00019	0.000060	0.000044
Deschutes River	Dioxin/furans	OCDD	WB	3		1	0.000040	0.00035	0.00013	0.000019
Deschutes River	Dioxin/furans	2,3,7,8-TCDF	FS	3		3	0.00016	0.00034	0.00023	0.000099
Deschutes River	Dioxin/furans	2,3,7,8-TCDF	WB	3		3	0.00042	0.00052	0.00047	0.000050
Deschutes River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3		1	0.000030	0.000060	0.000032	0.000025
Deschutes River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3		2	0.000020	0.000050	0.000037	0.000023
Deschutes River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3		0	0.000010	0.000040	0.000013	0.0000076
Deschutes River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3		3	0.000050	0.000070	0.000060	0.000010
Deschutes River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3		1	0.000040	0.000080	0.000037	0.0000058
Deschutes River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3		3	0.000020	0.000030	0.000023	0.0000058
Deschutes River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3		1	0.000040	0.00010	0.000043	0.0000058
Deschutes River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3		1	0.000010	0.000030	0.000015	0.000013
Deschutes River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3		2	0.000080	0.00012	0.000087	0.000042
Deschutes River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3		0	0.000010	0.000020	0.0000067	0.0000029
Deschutes River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3		2	0.000080	0.00015	0.00011	0.000061
Deschutes River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3		3	0.00015	0.00017	0.00016	0.000012
Deschutes River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3		2	0.000070	0.00013	0.000068	0.0000029
Deschutes River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3		3	0.000090	0.00011	0.000097	0.000012
Deschutes River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3		1	0.000040	0.00013	0.000047	0.000016
Deschutes River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3		1	0.000030	0.000040	0.000022	0.0000076
Deschutes River	Dioxin/furans	OCDF	FS	3		1	0.000080	0.00012	0.000060	0.000020
Deschutes River	Dioxin/furans	OCDF	WB	3		2	0.000040	0.000090	0.000060	0.000036
Deschutes River	Guaiaacols/Phenols	4-Chloroguaiaicol	FS	3		0	440	470	230	8.5
Deschutes River	Guaiaacols/Phenols	4-Chloroguaiaicol	WB	3		0	480	500	240	5.4
Deschutes River	Guaiaacols/Phenols	3,4-Dichloroguaiaicol	FS	3		0	440	470	230	8.5
Deschutes River	Guaiaacols/Phenols	3,4-Dichloroguaiaicol	WB	3		0	480	500	240	5.4
Deschutes River	Guaiaacols/Phenols	4,5-Dichloroguaiaicol	FS	3		0	440	470	230	8.5
Deschutes River	Guaiaacols/Phenols	4,5-Dichloroguaiaicol	WB	3		0	480	500	240	5.4

Appendix D-2: Tributary Summary Statistics
Largescale Sucker

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples		Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Deschutes River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3		0	440	470	230	8.5
Deschutes River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3		0	480	500	240	5.4
Deschutes River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3		0	440	470	230	8.5
Deschutes River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3		0	480	500	240	5.4
Deschutes River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3		0	180	190	91	3.4
Deschutes River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3		0	190	200	97	2.2
Deschutes River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3		0	440	470	230	8.5
Deschutes River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3		0	480	500	240	5.4
Deschutes River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3		0	180	190	91	3.4
Deschutes River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3		0	190	200	97	2.2
Deschutes River	Guaiacols/Phenols	2-Chlorophenol	FS	3		0	180	190	91	3.4
Deschutes River	Guaiacols/Phenols	2-Chlorophenol	WB	3		0	190	200	97	2.2
Deschutes River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3		0	180	190	91	3.4
Deschutes River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3		0	190	200	97	2.2
Deschutes River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3		0	180	190	91	3.4
Deschutes River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3		0	190	200	97	2.2
Deschutes River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3		0	440	470	230	8.5
Deschutes River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3		0	480	500	240	5.4
Deschutes River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3		0	180	190	91	3.4
Deschutes River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3		0	180	190	91	3.4
Deschutes River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3		0	190	200	97	2.2
Deschutes River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3		0	180	190	91	3.4
Deschutes River	Guaiacols/Phenols	Pentachlorophenol	FS	3		0	180	190	91	3.4
Deschutes River	Guaiacols/Phenols	Pentachlorophenol	WB	3		0	190	200	97	2.2
Deschutes River	Guaiacols/Phenols	Phenol	FS	3		0	180	190	91	3.4
Deschutes River	Guaiacols/Phenols	Phenol	WB	3		0	190	200	97	2.2
Deschutes River	Metals	Aluminum	FS	3		1	1,000	5,000	2,000	870
Deschutes River	Metals	Aluminum	WB	3		0	5,000	20,000	7,500	4,300
Deschutes River	Metals	Antimony	FS	3		0	50	50	25	0.00
Deschutes River	Metals	Antimony	WB	3		0	50	50	25	0.00
Deschutes River	Metals	Arsenic	FS	3		3	83	98	91	7.6
Deschutes River	Metals	Arsenic	WB	3		3	120	140	130	12
Deschutes River	Metals	Barium	FS	3		3	460	710	580	130
Deschutes River	Metals	Barium	WB	3		3	870	1,400	1,100	270
Deschutes River	Metals	Beryllium	FS	3		0	4.0	6.0	2.3	0.58
Deschutes River	Metals	Beryllium	WB	3		0	4.0	4.0	2.0	0.00
Deschutes River	Metals	Cadmium	FS	3		1	4.0	5.7	3.2	2.1
Deschutes River	Metals	Cadmium	WB	3		3	13	14	13	0.58
Deschutes River	Metals	Chromium	FS	3		0	100	100	50	0.00
Deschutes River	Metals	Chromium	WB	3		3	170	240	210	38
Deschutes River	Metals	Cobalt	FS	3		3	17	22	20	2.6
Deschutes River	Metals	Cobalt	WB	3		3	130	220	170	46
Deschutes River	Metals	Copper	FS	3		3	610	630	610	12
Deschutes River	Metals	Copper	WB	3		3	800	1,300	1,000	240
Deschutes River	Metals	Lead	FS	3		1	10	11	7.0	3.5
Deschutes River	Metals	Lead	WB	3		3	120	140	130	8.7
Deschutes River	Metals	Manganese	FS	3		3	1,500	2,100	1,700	290
Deschutes River	Metals	Manganese	WB	3		3	6,400	9,100	7,300	1,500
Deschutes River	Metals	Mercury	FS	3		3	71	110	92	19
Deschutes River	Metals	Mercury	WB	3		3	82	190	120	58
Deschutes River	Metals	Nickel	FS	3		3	52	75	60	13
Deschutes River	Metals	Nickel	WB	3		3	55	82	71	14
Deschutes River	Metals	Selenium	FS	3		3	200	220	210	12
Deschutes River	Metals	Selenium	WB	3		3	250	260	260	5.8
Deschutes River	Metals	Silver	FS	3		0	100	200	67	29
Deschutes River	Metals	Silver	WB	3		0	100	100	50	0.00
Deschutes River	Metals	Thallium	FS	3		0	50	50	25	0.00
Deschutes River	Metals	Thallium	WB	3		0	50	50	25	0.00
Deschutes River	Metals	Vanadium	FS	3		1	18	20	13	4.6
Deschutes River	Metals	Vanadium	WB	3		3	100	200	150	48
Deschutes River	Metals	Zinc	FS	3		3	19,000	21,000	20,000	1,400
Deschutes River	Metals	Zinc	WB	3		3	22,000	27,000	24,000	2,400
Deschutes River	PCBs	Aroclor 1016	FS	3		0	19	21	10	0.50
Deschutes River	PCBs	Aroclor 1016	WB	3		0	17	20	9.3	0.76
Deschutes River	PCBs	Aroclor 1221	FS	3		0	19	21	10	0.50
Deschutes River	PCBs	Aroclor 1221	WB	3		0	17	20	9.3	0.76
Deschutes River	PCBs	Aroclor 1232	FS	3		0	19	21	10	0.50
Deschutes River	PCBs	Aroclor 1232	WB	3		0	17	20	9.3	0.76
Deschutes River	PCBs	Aroclor 1242	FS	3		0	19	21	10	0.50
Deschutes River	PCBs	Aroclor 1242	WB	3		0	17	20	9.3	0.76
Deschutes River	PCBs	Aroclor 1248	FS	3		0	19	21	10	0.50
Deschutes River	PCBs	Aroclor 1248	WB	3		0	17	20	9.3	0.76
Deschutes River	PCBs	Aroclor 1254	FS	3		1	14	20	11	2.5
Deschutes River	PCBs	Aroclor 1254	WB	3		2	20	58	38	25
Deschutes River	PCBs	Aroclor 1260	FS	3		0	19	21	10	0.50
Deschutes River	PCBs	Aroclor 1260	WB	3		0	17	20	9.3	0.76

Appendix D-2: Tributary Summary Statistics
Largescale Sucker

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples		Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Deschutes River	PCBs	PCB 077	FS	3		3	0.012	0.024	0.017	0.0061
Deschutes River	PCBs	PCB 077	WB	3		3	0.038	0.041	0.040	0.0016
Deschutes River	PCBs	PCB 105	FS	3		3	0.32	0.59	0.44	0.14
Deschutes River	PCBs	PCB 105	WB	3		3	0.95	1.2	1.1	0.13
Deschutes River	PCBs	PCB 114	FS	3		3	0.024	0.046	0.034	0.011
Deschutes River	PCBs	PCB 114	WB	3		3	0.068	0.079	0.072	0.0059
Deschutes River	PCBs	PCB 118	FS	3		3	0.75	1.3	1.0	0.28
Deschutes River	PCBs	PCB 118	WB	3		3	2.2	2.7	2.4	0.26
Deschutes River	PCBs	PCB 123	FS	3		3	0.011	0.022	0.017	0.0057
Deschutes River	PCBs	PCB 123	WB	3		3	0.032	0.036	0.034	0.0022
Deschutes River	PCBs	PCB 126	FS	3		3	0.0023	0.0037	0.0030	0.00070
Deschutes River	PCBs	PCB 126	WB	3		3	0.0072	0.0081	0.0076	0.00047
Deschutes River	PCBs	PCB 156	FS	3		3	0.12	0.22	0.16	0.051
Deschutes River	PCBs	PCB 156	WB	3		3	0.38	0.42	0.40	0.019
Deschutes River	PCBs	PCB 157	FS	3		3	0.023	0.043	0.031	0.011
Deschutes River	PCBs	PCB 157	WB	3		3	0.071	0.085	0.077	0.0073
Deschutes River	PCBs	PCB 167	FS	3		3	0.055	0.099	0.075	0.022
Deschutes River	PCBs	PCB 167	WB	3		3	0.17	0.18	0.17	0.0071
Deschutes River	PCBs	PCB 169	FS	3		0	0.00050	0.0015	0.00042	0.00029
Deschutes River	PCBs	PCB 169	WB	3		0	0.0010	0.0010	0.00050	0.00
Deschutes River	PCBs	PCB 170	FS	3		3	0.18	0.37	0.26	0.098
Deschutes River	PCBs	PCB 170	WB	3		3	0.53	0.59	0.57	0.032
Deschutes River	PCBs	PCB 180	FS	3		3	0.55	1.1	0.81	0.29
Deschutes River	PCBs	PCB 180	WB	3		3	1.6	2.0	1.8	0.17
Deschutes River	PCBs	PCB 189	FS	3		3	0.0075	0.015	0.011	0.0037
Deschutes River	PCBs	PCB 189	WB	3		3	0.023	0.029	0.026	0.0031
Deschutes River	Pesticides	Aldrin	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	Aldrin	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	Alpha-BHC	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	Alpha-BHC	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	Alpha-Chlordane	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	Alpha-Chlordane	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	Beta-BHC	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	Beta-BHC	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	cis-Nonachlor	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	cis-Nonachlor	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	DDD-o,p'	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	DDD-o,p'	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	DDE-o,p'	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	DDE-o,p'	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	DDT-o,p'	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	DDT-o,p'	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	DDD-p,p'	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	DDD-p,p'	WB	3		3	1.6	2.7	2.1	0.55
Deschutes River	Pesticides	DDE-p,p'	FS	3		3	14	31	20	9.3
Deschutes River	Pesticides	DDE-p,p'	WB	3		3	41	53	49	6.7
Deschutes River	Pesticides	DDT-p,p'	FS	3		1	1.9	2.5	1.5	0.88
Deschutes River	Pesticides	DDT-p,p'	WB	3		2	1.1	2.0	1.2	0.21
Deschutes River	Pesticides	DDMU	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	DDMU	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	Delta-BHC	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	Delta-BHC	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	Endosulfan Sulfate	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	Endosulfan Sulfate	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	Gamma-Chlordane	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	Gamma-Chlordane	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	Gamma-Chlordene	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	Gamma-Chlordene	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	Heptachlor	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	Heptachlor	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	Heptachlor Epoxide	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	Heptachlor Epoxide	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	Hexachlorobenzene	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	Hexachlorobenzene	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	Lindane	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	Lindane	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	Mirex	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	Mirex	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	Oxychlordane	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	Oxychlordane	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	Pentachloroanisol	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	Pentachloroanisol	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Pesticides	Toxaphene	FS	3		0	58	64	30	1.6
Deschutes River	Pesticides	Toxaphene	WB	3		0	51	60	28	2.3

Appendix D-2: Tributary Summary Statistics
Largescale Sucker

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples		Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Deschutes River	Pesticides	trans-Nonachlor	FS	3		0	1.9	2.1	1.0	0.050
Deschutes River	Pesticides	trans-Nonachlor	WB	3		0	1.7	2.0	0.93	0.076
Deschutes River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3		0	4.8	4.9	2.4	0.029
Deschutes River	Semivolatiles	1,2-Diphenylhydrazine	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	1,2-Diphenylhydrazine	WB	3		0	4.8	95	17	26
Deschutes River	Semivolatiles	2,4-Dinitrotoluene	FS	3		0	44	47	23	0.81
Deschutes River	Semivolatiles	2,4-Dinitrotoluene	WB	3		0	9.5	9.9	4.8	0.10
Deschutes River	Semivolatiles	2,6-Dinitrotoluene	FS	3		0	88	95	45	1.7
Deschutes River	Semivolatiles	2,6-Dinitrotoluene	WB	3		0	19	20	9.7	0.22
Deschutes River	Semivolatiles	2-Chloronaphthalene	FS	3		0	44	47	23	0.81
Deschutes River	Semivolatiles	2-Chloronaphthalene	WB	3		0	4.8	4.9	2.4	0.029
Deschutes River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3		0	4.8	95	17	26
Deschutes River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3		0	4.8	4.9	2.4	0.029
Deschutes River	Semivolatiles	Acenaphthene	FS	3		0	44	47	23	0.81
Deschutes River	Semivolatiles	Acenaphthene	WB	3		1	9.6	37	16	19
Deschutes River	Semivolatiles	Acenaphthylene	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	Acenaphthylene	WB	3		2	2.8	6.5	3.9	2.3
Deschutes River	Semivolatiles	Anthracene	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	Anthracene	WB	3		0	4.8	95	17	26
Deschutes River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3		0	4.8	4.9	2.4	0.029
Deschutes River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3		0	4.8	4.9	2.4	0.029
Deschutes River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3		0	4.8	4.9	2.4	0.029
Deschutes River	Semivolatiles	Benzo(a)anthracene	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	Benzo(a)anthracene	WB	3		0	4.8	99	33	27
Deschutes River	Semivolatiles	Benzo(a)pyrene	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	Benzo(a)pyrene	WB	3		0	95	99	48	1.0
Deschutes River	Semivolatiles	Benzo(g,h,i)perylene	FS	3		0	44	47	23	0.81
Deschutes River	Semivolatiles	Benzo(g,h,i)perylene	WB	3		0	190	200	97	2.2
Deschutes River	Semivolatiles	Benzo[b]fluoranthene	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	Benzo[b]fluoranthene	WB	3		0	190	200	97	2.2
Deschutes River	Semivolatiles	Benzo[k]fluoranthene	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	Benzo[k]fluoranthene	WB	3		0	190	200	97	2.2
Deschutes River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3		0	44	47	23	0.81
Deschutes River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3		0	9.5	9.9	4.8	0.10
Deschutes River	Semivolatiles	Chrysene	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	Chrysene	WB	3		0	4.8	99	33	27
Deschutes River	Semivolatiles	Dibenz[a,h]anthracene	FS	3		0	44	47	23	0.81
Deschutes River	Semivolatiles	Dibenz[a,h]anthracene	WB	3		0	190	200	97	2.2
Deschutes River	Semivolatiles	Dibenzofuran	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	Dibenzofuran	WB	3		0	4.8	4.9	2.4	0.029
Deschutes River	Semivolatiles	Fluoranthene	FS	3		0	44	47	23	0.81
Deschutes River	Semivolatiles	Fluoranthene	WB	3		0	9.6	190	35	52
Deschutes River	Semivolatiles	9H-Fluorene	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	9H-Fluorene	WB	3		0	4.8	4.9	2.4	0.029
Deschutes River	Semivolatiles	Hexachlorobutadiene	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	Hexachlorobutadiene	WB	3		0	4.8	4.9	2.4	0.029
Deschutes River	Semivolatiles	Hexachloroethane	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	Hexachloroethane	WB	3		0	4.8	130	23	35
Deschutes River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3		0	44	47	23	0.81
Deschutes River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3		0	190	200	97	2.2
Deschutes River	Semivolatiles	Naphthalene	FS	3		0	22	28	12	1.4
Deschutes River	Semivolatiles	Naphthalene	WB	3		0	20	34	14	3.7
Deschutes River	Semivolatiles	Naphthalene, 1-methyl-	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	Naphthalene, 1-methyl-	WB	3		0	4.8	4.9	2.4	0.029
Deschutes River	Semivolatiles	Naphthalene, 2-methyl-	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	Naphthalene, 2-methyl-	WB	3		2	4.8	10	6.7	3.9
Deschutes River	Semivolatiles	Nitrobenzene	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	Nitrobenzene	WB	3		0	4.8	4.9	2.4	0.029
Deschutes River	Semivolatiles	Phenanthrene	FS	3		0	22	24	11	0.42
Deschutes River	Semivolatiles	Phenanthrene	WB	3		0	6.8	95	18	25
Deschutes River	Semivolatiles	Pyrene	FS	3		0	44	47	23	0.81
Deschutes River	Semivolatiles	Pyrene	WB	3		2	5.5	9.6	5.6	0.85
Deschutes River	Semivolatiles	Retene	FS	3		0	44	47	23	0.81
Deschutes River	Semivolatiles	Retene	WB	3		2	19	200	52	42
Snake River	Dioxin/furans	2,3,7,8-TCDD	FS	3		0	0.000010	0.000020	0.0000067	0.0000029
Snake River	Dioxin/furans	2,3,7,8-TCDD	WB	3		1	0.000020	0.000030	0.000018	0.000010
Snake River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3		2	0.000010	0.000040	0.000022	0.000018
Snake River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3		1	0.000020	0.000030	0.000018	0.000010
Snake River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3		0	0.000010	0.000010	0.0000050	0.00
Snake River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3		2	0.000010	0.000020	0.000015	0.0000087

Appendix D-2: Tributary Summary Statistics
Largescale Sucker

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples		Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Snake River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3		2	0.000010	0.000040	0.000022	0.000018
Snake River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3		0	0.000010	0.000020	0.0000067	0.0000029
Snake River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3		2	0.000010	0.000020	0.000015	0.0000087
Snake River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3		3	0.000020	0.000030	0.000023	0.0000058
Snake River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3		2	0.000010	0.000010	0.000058	0.000049
Snake River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3		2	0.000030	0.000035	0.00020	0.00017
Snake River	Dioxin/furans	OCDD	FS	3		2	0.000010	0.00015	0.000092	0.000077
Snake River	Dioxin/furans	OCDD	WB	3		3	0.0013	0.0026	0.0017	0.00072
Snake River	Dioxin/furans	2,3,7,8-TCDF	FS	3		2	0.000010	0.00011	0.000075	0.000061
Snake River	Dioxin/furans	2,3,7,8-TCDF	WB	3		3	0.000080	0.00028	0.00021	0.00011
Snake River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3		0	0.000010	0.000020	0.0000067	0.0000029
Snake River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3		0	0.000020	0.000050	0.000015	0.0000087
Snake River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3		1	0.000010	0.000020	0.000012	0.0000076
Snake River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3		1	0.000020	0.000050	0.000018	0.0000076
Snake River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3		1	0.000010	0.000010	0.0000067	0.0000029
Snake River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3		0	0.000010	0.000040	0.000012	0.0000076
Snake River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3		0	0.000010	0.000010	0.0000050	0.00
Snake River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3		0	0.000010	0.000040	0.000012	0.0000076
Snake River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3		1	0.000010	0.000010	0.0000067	0.0000029
Snake River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3		0	0.000010	0.000040	0.000012	0.0000076
Snake River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3		0	0.000010	0.000010	0.0000050	0.00
Snake River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3		0	0.000010	0.000040	0.000012	0.0000076
Snake River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3		0	0.000020	0.000020	0.000010	0.00
Snake River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3		0	0.000010	0.000050	0.000013	0.000010
Snake River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3		0	0.000020	0.000020	0.000010	0.00
Snake River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3		0	0.000010	0.000050	0.000013	0.000010
Snake River	Dioxin/furans	OCDF	FS	3		0	0.000020	0.000040	0.000015	0.0000050
Snake River	Dioxin/furans	OCDF	WB	3		2	0.000010	0.00051	0.00022	0.00026
Snake River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3		0	840	920	440	21
Snake River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3		0	880	1,000	470	30
Snake River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3		0	840	920	440	21
Snake River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3		0	880	1,000	470	30
Snake River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3		0	840	920	440	21
Snake River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3		0	880	1,000	470	30
Snake River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3		0	840	920	440	21
Snake River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3		0	880	1,000	470	30
Snake River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3		0	840	920	440	21
Snake River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3		0	880	1,000	470	30
Snake River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3		0	340	370	180	8.3
Snake River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3		0	350	400	190	12
Snake River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3		0	840	920	440	21
Snake River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3		0	880	1,000	470	30
Snake River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3		0	340	370	180	8.3
Snake River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3		0	350	400	190	12
Snake River	Guaiacols/Phenols	2-Chlorophenol	FS	3		0	340	370	180	8.3
Snake River	Guaiacols/Phenols	2-Chlorophenol	WB	3		0	350	400	190	12
Snake River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3		0	340	370	180	8.3
Snake River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3		0	350	400	190	12
Snake River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3		0	340	370	180	8.3
Snake River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3		0	350	400	190	12
Snake River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3		0	840	920	440	21
Snake River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3		0	880	1,000	470	30
Snake River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3		0	340	370	180	8.3
Snake River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3		0	350	400	190	12
Snake River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3		0	340	370	180	8.3
Snake River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3		0	350	400	190	12
Snake River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3		0	340	370	180	8.3
Snake River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3		0	350	400	190	12
Snake River	Guaiacols/Phenols	Pentachlorophenol	FS	3		0	340	370	180	8.3
Snake River	Guaiacols/Phenols	Pentachlorophenol	WB	3		0	350	400	190	12
Snake River	Guaiacols/Phenols	Phenol	FS	3		0	340	370	180	8.3
Snake River	Guaiacols/Phenols	Phenol	WB	3		0	350	400	190	12
Snake River	Metals	Aluminum	FS	3		3	710	4,200	2,000	1,900
Snake River	Metals	Aluminum	WB	3		3	110,000	140,000	120,000	13,000
Snake River	Metals	Antimony	FS	3		0	50	50	25	0.00
Snake River	Metals	Antimony	WB	3		0	50	50	25	0.00
Snake River	Metals	Arsenic	FS	3		3	82	100	89	9.9
Snake River	Metals	Arsenic	WB	3		3	200	270	230	35
Snake River	Metals	Barium	FS	3		3	850	1,600	1,400	440
Snake River	Metals	Barium	WB	3		3	2,900	3,500	3,200	320
Snake River	Metals	Beryllium	FS	3		0	4.0	4.0	2.0	0.00
Snake River	Metals	Beryllium	WB	3		3	5.7	6.6	6.0	0.52
Snake River	Metals	Cadmium	FS	3		0	4.0	4.0	2.0	0.00
Snake River	Metals	Cadmium	WB	3		3	35	42	39	3.6
Snake River	Metals	Chromium	FS	3		2	100	150	110	51
Snake River	Metals	Chromium	WB	3		3	390	490	440	50

Appendix D-2: Tributary Summary Statistics
Largescale Sucker

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples		Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Snake River	Metals	Cobalt	FS	3	3	3	51	120	93	37
Snake River	Metals	Cobalt	WB	3	3	3	300	400	330	58
Snake River	Metals	Copper	FS	3	3	3	430	550	480	64
Snake River	Metals	Copper	WB	3	3	3	910	1,300	1,100	190
Snake River	Metals	Lead	FS	3	3	3	17	25	22	4.4
Snake River	Metals	Lead	WB	3	3	3	86	110	99	14
Snake River	Metals	Manganese	FS	3	3	3	2,300	3,100	2,700	450
Snake River	Metals	Manganese	WB	3	3	3	14,000	18,000	16,000	2,100
Snake River	Metals	Mercury	FS	3	3	3	340	370	360	15
Snake River	Metals	Mercury	WB	3	3	3	180	200	190	12
Snake River	Metals	Nickel	FS	3	3	3	36	63	46	15
Snake River	Metals	Nickel	WB	3	3	3	420	460	440	25
Snake River	Metals	Selenium	FS	3	3	3	270	400	350	72
Snake River	Metals	Selenium	WB	3	3	3	380	450	420	38
Snake River	Metals	Silver	FS	3	0	0	100	100	50	0.00
Snake River	Metals	Silver	WB	3	0	0	100	100	50	0.00
Snake River	Metals	Thallium	FS	3	0	0	50	50	25	0.00
Snake River	Metals	Thallium	WB	3	0	0	50	50	25	0.00
Snake River	Metals	Vanadium	FS	3	3	3	14	16	15	1.2
Snake River	Metals	Vanadium	WB	3	3	3	400	500	440	53
Snake River	Metals	Zinc	FS	3	3	3	17,000	20,000	19,000	1,500
Snake River	Metals	Zinc	WB	3	3	3	22,000	25,000	24,000	1,800
Snake River	PCBs	Aroclor 1016	FS	3	0	0	19	20	9.8	0.29
Snake River	PCBs	Aroclor 1016	WB	3	0	0	20	20	10	0.00
Snake River	PCBs	Aroclor 1221	FS	3	0	0	19	20	9.8	0.29
Snake River	PCBs	Aroclor 1221	WB	3	0	0	20	20	10	0.00
Snake River	PCBs	Aroclor 1232	FS	3	0	0	19	20	9.8	0.29
Snake River	PCBs	Aroclor 1232	WB	3	0	0	20	20	10	0.00
Snake River	PCBs	Aroclor 1242	FS	3	0	0	19	20	9.8	0.29
Snake River	PCBs	Aroclor 1242	WB	3	0	0	20	20	10	0.00
Snake River	PCBs	Aroclor 1248	FS	3	0	0	19	20	9.8	0.29
Snake River	PCBs	Aroclor 1248	WB	3	0	0	20	20	10	0.00
Snake River	PCBs	Aroclor 1254	FS	3	0	0	19	20	9.8	0.29
Snake River	PCBs	Aroclor 1254	WB	3	1	1	14	20	11	2.3
Snake River	PCBs	Aroclor 1260	FS	3	0	0	19	20	9.8	0.29
Snake River	PCBs	Aroclor 1260	WB	3	0	0	20	20	10	0.00
Snake River	PCBs	PCB 077	FS	3	3	3	0.0037	0.0062	0.0051	0.0013
Snake River	PCBs	PCB 077	WB	3	3	3	0.0043	0.012	0.0092	0.0043
Snake River	PCBs	PCB 105	FS	3	3	3	0.15	0.17	0.16	0.015
Snake River	PCBs	PCB 105	WB	3	3	3	0.19	0.32	0.27	0.069
Snake River	PCBs	PCB 114	FS	3	3	3	0.012	0.016	0.014	0.0017
Snake River	PCBs	PCB 114	WB	3	3	3	0.018	0.025	0.022	0.0041
Snake River	PCBs	PCB 118	FS	3	3	3	0.36	0.43	0.40	0.038
Snake River	PCBs	PCB 118	WB	3	3	3	0.50	0.75	0.65	0.13
Snake River	PCBs	PCB 123	FS	3	3	3	0.0055	0.0075	0.0067	0.0011
Snake River	PCBs	PCB 123	WB	3	3	3	0.0079	0.013	0.011	0.0024
Snake River	PCBs	PCB 126	FS	3	0	0	0.00063	0.00093	0.00039	0.000075
Snake River	PCBs	PCB 126	WB	3	0	0	0.00080	0.0013	0.00048	0.00013
Snake River	PCBs	PCB 156	FS	3	3	3	0.085	0.10	0.097	0.010
Snake River	PCBs	PCB 156	WB	3	3	3	0.12	0.16	0.14	0.018
Snake River	PCBs	PCB 157	FS	3	3	3	0.015	0.018	0.017	0.0016
Snake River	PCBs	PCB 157	WB	3	3	3	0.023	0.030	0.028	0.0043
Snake River	PCBs	PCB 167	FS	3	3	3	0.039	0.050	0.045	0.0058
Snake River	PCBs	PCB 167	WB	3	3	3	0.052	0.073	0.063	0.010
Snake River	PCBs	PCB 169	FS	3	1	1	0.0020	0.089	0.030	0.051
Snake River	PCBs	PCB 169	WB	3	0	0	0.0023	0.0040	0.0015	0.00047
Snake River	PCBs	PCB 170	FS	3	3	3	0.17	0.21	0.18	0.021
Snake River	PCBs	PCB 170	WB	3	3	3	0.18	0.25	0.22	0.034
Snake River	PCBs	PCB 180	FS	3	3	3	0.54	0.66	0.60	0.062
Snake River	PCBs	PCB 180	WB	3	3	3	0.59	0.85	0.73	0.13
Snake River	PCBs	PCB 189	FS	3	3	3	0.0079	0.0099	0.0086	0.0011
Snake River	PCBs	PCB 189	WB	3	3	3	0.0080	0.012	0.0100	0.0018
Snake River	Pesticides	Aldrin	FS	3	0	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Aldrin	WB	3	0	0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Alpha-BHC	FS	3	0	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Alpha-BHC	WB	3	0	0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Alpha-Chlordene	FS	3	0	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Alpha-Chlordene	WB	3	0	0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Beta-BHC	FS	3	0	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Beta-BHC	WB	3	0	0	2.0	2.0	1.0	0.00
Snake River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	0	2.0	2.0	1.0	0.00
Snake River	Pesticides	cis-Nonachlor	FS	3	0	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	cis-Nonachlor	WB	3	0	0	2.0	2.0	1.0	0.00
Snake River	Pesticides	DDD-o,p'	FS	3	1	1	1.5	2.0	1.2	0.30
Snake River	Pesticides	DDD-o,p'	WB	3	2	2	2.0	3.2	2.2	1.1

Appendix D-2: Tributary Summary Statistics
Largescale Sucker

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples		Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Snake River	Pesticides	DDE-o,p'	FS	3		1	1.2	2.0	1.1	0.13
Snake River	Pesticides	DDE-o,p'	WB	3		2	1.2	2.0	1.2	0.20
Snake River	Pesticides	DDT-o,p'	FS	3		1	1.9	5.3	2.4	2.5
Snake River	Pesticides	DDT-o,p'	WB	3		2	1.2	2.0	1.2	0.20
Snake River	Pesticides	DDD-p,p'	FS	3		2	2.0	3.9	2.5	1.5
Snake River	Pesticides	DDD-p,p'	WB	3		2	1.9	9.6	5.9	3.9
Snake River	Pesticides	DDE-p,p'	FS	3		3	44	72	62	16
Snake River	Pesticides	DDE-p,p'	WB	3		3	53	94	78	22
Snake River	Pesticides	DDT-p,p'	FS	3		3	1.5	2.4	2.0	0.47
Snake River	Pesticides	DDT-p,p'	WB	3		3	2.5	8.1	5.6	2.8
Snake River	Pesticides	DDMU	FS	3		2	1.9	6.4	3.2	2.8
Snake River	Pesticides	DDMU	WB	3		2	2.0	3.0	2.3	1.1
Snake River	Pesticides	Delta-BHC	FS	3		0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Delta-BHC	WB	3		0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Endosulfan Sulfate	FS	3		0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Endosulfan Sulfate	WB	3		0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Gamma-Chlordane	FS	3		0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Gamma-Chlordane	WB	3		0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Gamma-Chlordene	FS	3		0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Gamma-Chlordene	WB	3		0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Heptachlor	FS	3		0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Heptachlor	WB	3		0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Heptachlor Epoxide	FS	3		0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Heptachlor Epoxide	WB	3		0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Hexachlorobenzene	FS	3		0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Hexachlorobenzene	WB	3		0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Lindane	FS	3		0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Lindane	WB	3		0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Mirex	FS	3		0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Mirex	WB	3		0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Oxychlordane	FS	3		0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Oxychlordane	WB	3		0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Pentachloroanisol	FS	3		0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Pentachloroanisol	WB	3		0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Toxaphene	FS	3		0	58	60	30	0.50
Snake River	Pesticides	Toxaphene	WB	3		0	59	59	30	0.00
Snake River	Pesticides	trans-Nonachlor	FS	3		0	1.9	2.0	0.98	0.029
Snake River	Pesticides	trans-Nonachlor	WB	3		1	1.2	2.0	1.1	0.12
Snake River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3		0	8.4	9.2	4.4	0.20
Snake River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3		0	8.8	10	4.7	0.31
Snake River	Semivolatiles	1,2-Diphenylhydrazine	FS	3		0	8.4	9.2	4.4	0.20
Snake River	Semivolatiles	1,2-Diphenylhydrazine	WB	3		0	8.8	10	4.7	0.31
Snake River	Semivolatiles	2,4-Dinitrotoluene	FS	3		0	17	19	8.9	0.43
Snake River	Semivolatiles	2,4-Dinitrotoluene	WB	3		0	18	20	9.4	0.61
Snake River	Semivolatiles	2,6-Dinitrotoluene	FS	3		0	34	37	18	0.83
Snake River	Semivolatiles	2,6-Dinitrotoluene	WB	3		0	35	40	19	1.2
Snake River	Semivolatiles	2-Chloronaphthalene	FS	3		0	17	19	8.9	0.43
Snake River	Semivolatiles	2-Chloronaphthalene	WB	3		0	18	20	9.4	0.61
Snake River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3		0	8.4	9.2	4.4	0.20
Snake River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3		0	8.8	10	4.7	0.31
Snake River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3		0	8.4	9.2	4.4	0.20
Snake River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3		0	8.8	10	4.7	0.31
Snake River	Semivolatiles	Acenaphthene	FS	3		0	17	19	8.9	0.43
Snake River	Semivolatiles	Acenaphthene	WB	3		0	18	20	9.4	0.61
Snake River	Semivolatiles	Acenaphthylene	FS	3		0	8.4	9.2	4.4	0.20
Snake River	Semivolatiles	Acenaphthylene	WB	3		0	8.8	10	4.7	0.31
Snake River	Semivolatiles	Anthracene	FS	3		0	8.4	9.2	4.4	0.20
Snake River	Semivolatiles	Anthracene	WB	3		0	8.8	10	4.7	0.31
Snake River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3		0	8.4	9.2	4.4	0.20
Snake River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3		0	8.8	10	4.7	0.31
Snake River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3		0	8.4	9.2	4.4	0.20
Snake River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3		0	8.8	10	4.7	0.31
Snake River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3		0	8.4	9.2	4.4	0.20
Snake River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3		0	8.8	10	4.7	0.31
Snake River	Semivolatiles	Benzo(a)anthracene	FS	3		1	7.2	9.2	5.3	1.6
Snake River	Semivolatiles	Benzo(a)anthracene	WB	3		0	8.8	10	4.7	0.31
Snake River	Semivolatiles	Benzo(a)pyrene	FS	3		1	6.8	9.2	5.2	1.4
Snake River	Semivolatiles	Benzo(a)pyrene	WB	3		0	8.8	10	4.7	0.31
Snake River	Semivolatiles	Benzo(g,h,i)perylene	FS	3		1	17	21	13	6.8
Snake River	Semivolatiles	Benzo(g,h,i)perylene	WB	3		0	18	20	9.4	0.61
Snake River	Semivolatiles	Benzo[b]fluoranthene	FS	3		1	8.4	15	7.8	6.0
Snake River	Semivolatiles	Benzo[b]fluoranthene	WB	3		0	8.8	10	4.7	0.31
Snake River	Semivolatiles	Benzo[k]fluoranthene	FS	3		1	8.4	9.8	6.2	3.1
Snake River	Semivolatiles	Benzo[k]fluoranthene	WB	3		0	8.8	10	4.7	0.31
Snake River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3		0	17	19	8.9	0.43
Snake River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3		0	18	20	9.4	0.61

Appendix D-2: Tributary Summary Statistics
Largescale Sucker

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples		Detection frequency	Average		Standard Deviation
							Minimum	Maximum	
Snake River	Semivolatiles	Chrysene	FS	3	1	8.4	10	6.3	3.4
Snake River	Semivolatiles	Chrysene	WB	3	0	8.8	10	4.7	0.31
Snake River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	1	17	23	13	8.1
Snake River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	20	9.4	0.61
Snake River	Semivolatiles	Dibenzofuran	FS	3	0	8.4	9.2	4.4	0.20
Snake River	Semivolatiles	Dibenzofuran	WB	3	0	8.8	10	4.7	0.31
Snake River	Semivolatiles	Fluoranthene	FS	3	0	17	19	8.9	0.43
Snake River	Semivolatiles	Fluoranthene	WB	3	0	18	20	9.4	0.61
Snake River	Semivolatiles	9H-Fluorene	FS	3	0	8.4	9.2	4.4	0.20
Snake River	Semivolatiles	9H-Fluorene	WB	3	1	8.8	10	6.2	2.7
Snake River	Semivolatiles	Hexachlorobutadiene	FS	3	0	8.4	9.2	4.4	0.20
Snake River	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.8	10	4.7	0.31
Snake River	Semivolatiles	Hexachloroethane	FS	3	0	8.4	9.2	4.4	0.20
Snake River	Semivolatiles	Hexachloroethane	WB	3	0	8.8	10	4.7	0.31
Snake River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	1	17	25	14	9.2
Snake River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	20	9.4	0.61
Snake River	Semivolatiles	Naphthalene	FS	3	0	11	17	6.8	1.6
Snake River	Semivolatiles	Naphthalene	WB	3	0	17	24	10	1.8
Snake River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	8.4	9.2	4.4	0.20
Snake River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.8	10	4.7	0.31
Snake River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	8.4	9.2	4.4	0.20
Snake River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	10	25	9.4	3.9
Snake River	Semivolatiles	Nitrobenzene	FS	3	0	8.4	9.2	4.4	0.20
Snake River	Semivolatiles	Nitrobenzene	WB	3	0	8.8	10	4.7	0.31
Snake River	Semivolatiles	Phenanthrene	FS	3	0	8.4	9.2	4.4	0.20
Snake River	Semivolatiles	Phenanthrene	WB	3	0	8.8	10	4.7	0.31
Snake River	Semivolatiles	Pyrene	FS	3	0	17	19	8.9	0.43
Snake River	Semivolatiles	Pyrene	WB	3	0	8.8	20	7.9	3.0
Snake River	Semivolatiles	Retene	FS	3	0	17	19	8.9	0.43
Snake River	Semivolatiles	Retene	WB	3	0	18	20	9.4	0.61
Umatilla River	Dioxin/furans	2,3,7,8-TCDD	FS	4	3	0.000010	0.000070	0.000049	0.000030
Umatilla River	Dioxin/furans	2,3,7,8-TCDD	WB	3	2	0.000010	0.000080	0.000048	0.000039
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	4	4	0.00011	0.00016	0.00013	0.000022
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.00012	0.00013	0.00012	0.0000058
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	4	4	0.000090	0.00015	0.00011	0.000026
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	3	0.000090	0.00010	0.000097	0.0000058
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	4	2	0.000010	0.00011	0.000045	0.000050
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000010	0.000070	0.000042	0.000033
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	4	2	0.000010	0.000080	0.000035	0.000037
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	3	0.000030	0.000050	0.000043	0.000012
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	4	4	0.00011	0.00020	0.00015	0.000040
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	2	0.000010	0.00020	0.00012	0.00010
Umatilla River	Dioxin/furans	OCDD	FS	4	4	0.00016	0.00031	0.00022	0.000063
Umatilla River	Dioxin/furans	OCDD	WB	3	3	0.00036	0.00063	0.00050	0.00014
Umatilla River	Dioxin/furans	2,3,7,8-TCDF	FS	4	4	0.00015	0.00058	0.00030	0.00019
Umatilla River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00028	0.00052	0.00042	0.00012
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	4	3	0.000010	0.000040	0.000029	0.000017
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.000030	0.000040	0.000037	0.0000058
Umatilla River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	4	4	0.000030	0.000070	0.000040	0.000020
Umatilla River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.000030	0.000050	0.000043	0.000012
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	4	2	0.000010	0.000080	0.000030	0.000035
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	2	0.000010	0.000020	0.000015	0.0000087
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	4	3	0.000010	0.000080	0.000039	0.000031
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	3	0.000020	0.000040	0.000030	0.000010
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	4	3	0.000010	0.00017	0.000086	0.000068
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	3	0.000050	0.000080	0.000067	0.000015
Umatilla River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	4	3	0.000010	0.00021	0.00013	0.000088
Umatilla River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00012	0.00015	0.00014	0.000015
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	4	3	0.000010	0.00016	0.000094	0.000065
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	3	0.000060	0.00010	0.000087	0.000023
Umatilla River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	4	1	0.000010	0.00013	0.000036	0.000063
Umatilla River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
Umatilla River	Dioxin/furans	OCDF	FS	4	4	0.000020	0.00022	0.000095	0.000087
Umatilla River	Dioxin/furans	OCDF	WB	3	2	0.000010	0.00010	0.000055	0.000048
Umatilla River	Guaiaacols/Phenols	4-Chloroguaiacol	FS	4	0	470	520	250	13
Umatilla River	Guaiaacols/Phenols	4-Chloroguaiacol	WB	3	0	470	1,000	340	140
Umatilla River	Guaiaacols/Phenols	3,4-Dichloroguaiacol	FS	4	0	470	520	250	13
Umatilla River	Guaiaacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	470	1,000	340	140
Umatilla River	Guaiaacols/Phenols	4,5-Dichloroguaiacol	FS	4	0	470	520	250	13
Umatilla River	Guaiaacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	470	1,000	340	140
Umatilla River	Guaiaacols/Phenols	4,6-Dichloroguaiacol	FS	4	0	470	520	250	13
Umatilla River	Guaiaacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	470	1,000	340	140
Umatilla River	Guaiaacols/Phenols	3,4,5-Trichloroguaiacol	FS	4	0	470	520	250	13
Umatilla River	Guaiaacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	470	1,000	340	140
Umatilla River	Guaiaacols/Phenols	3,4,6-Trichloroguaiacol	FS	4	0	190	210	100	5.0
Umatilla River	Guaiaacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	190	400	140	57

Appendix D-2: Tributary Summary Statistics
Largescale Sucker

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples		Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	4		0	470	520	250	13
Umatilla River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3		0	470	1,000	340	140
Umatilla River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	4		0	190	210	100	5.0
Umatilla River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3		0	190	400	140	57
Umatilla River	Guaiacols/Phenols	2-Chlorophenol	FS	4		0	190	210	100	5.0
Umatilla River	Guaiacols/Phenols	2-Chlorophenol	WB	3		0	190	400	140	57
Umatilla River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	4		0	190	210	100	5.0
Umatilla River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3		0	190	400	140	57
Umatilla River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	4		0	190	210	100	5.0
Umatilla River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3		0	190	400	140	57
Umatilla River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	4		0	470	520	250	13
Umatilla River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3		0	470	1,000	340	140
Umatilla River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3		0	200	210	100	3.6
Umatilla River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	4		0	190	210	100	5.0
Umatilla River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3		0	190	400	140	57
Umatilla River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3		0	200	210	100	3.6
Umatilla River	Guaiacols/Phenols	Pentachlorophenol	FS	4		0	190	210	100	5.0
Umatilla River	Guaiacols/Phenols	Pentachlorophenol	WB	3		0	190	400	140	57
Umatilla River	Guaiacols/Phenols	Phenol	FS	4		0	190	210	100	5.0
Umatilla River	Guaiacols/Phenols	Phenol	WB	3		0	190	400	140	57
Umatilla River	Metals	Aluminum	FS	4		4	1,400	4,600	2,900	1,600
Umatilla River	Metals	Aluminum	WB	3		3	48,000	55,000	52,000	3,700
Umatilla River	Metals	Antimony	FS	4		0	50	50	25	0.00
Umatilla River	Metals	Antimony	WB	3		0	50	50	25	0.00
Umatilla River	Metals	Arsenic	FS	4		4	55	100	81	19
Umatilla River	Metals	Arsenic	WB	3		3	110	150	130	20
Umatilla River	Metals	Barium	FS	4		4	550	1,100	740	230
Umatilla River	Metals	Barium	WB	3		3	2,000	2,200	2,100	72
Umatilla River	Metals	Beryllium	FS	4		2	4.0	4.5	3.2	1.4
Umatilla River	Metals	Beryllium	WB	3		0	10	10	5.0	0.00
Umatilla River	Metals	Cadmium	FS	4		1	4.0	4.0	2.5	1.0
Umatilla River	Metals	Cadmium	WB	3		3	18	20	19	1.2
Umatilla River	Metals	Chromium	FS	4		1	100	130	70	40
Umatilla River	Metals	Chromium	WB	3		3	130	150	140	12
Umatilla River	Metals	Cobalt	FS	4		4	17	42	25	12
Umatilla River	Metals	Cobalt	WB	3		3	69	75	72	3.1
Umatilla River	Metals	Copper	FS	4		4	480	810	570	160
Umatilla River	Metals	Copper	WB	3		3	1,000	1,400	1,200	220
Umatilla River	Metals	Lead	FS	4		4	16	40	24	11
Umatilla River	Metals	Lead	WB	3		3	35	44	39	4.5
Umatilla River	Metals	Manganese	FS	4		4	1,800	2,500	2,100	380
Umatilla River	Metals	Manganese	WB	3		3	8,300	10,000	9,000	1,100
Umatilla River	Metals	Mercury	FS	4		4	230	280	260	22
Umatilla River	Metals	Mercury	WB	3		3	58	64	60	3.2
Umatilla River	Metals	Nickel	FS	4		4	85	170	130	36
Umatilla River	Metals	Nickel	WB	3		3	380	510	430	67
Umatilla River	Metals	Selenium	FS	4		4	250	310	280	28
Umatilla River	Metals	Selenium	WB	3		3	300	340	320	20
Umatilla River	Metals	Silver	FS	4		0	100	100	50	0.00
Umatilla River	Metals	Silver	WB	3		0	100	100	50	0.00
Umatilla River	Metals	Thallium	FS	4		0	50	50	25	0.00
Umatilla River	Metals	Thallium	WB	3		0	50	50	25	0.00
Umatilla River	Metals	Vanadium	FS	4		4	11	22	15	4.9
Umatilla River	Metals	Vanadium	WB	3		3	270	330	300	31
Umatilla River	Metals	Zinc	FS	4		4	16,000	18,000	17,000	900
Umatilla River	Metals	Zinc	WB	3		3	19,000	20,000	19,000	350
Umatilla River	PCBs	Aroclor 1016	FS	4		0	18	19	9.3	0.29
Umatilla River	PCBs	Aroclor 1016	WB	3		0	18	21	9.8	0.76
Umatilla River	PCBs	Aroclor 1221	FS	4		0	18	19	9.3	0.29
Umatilla River	PCBs	Aroclor 1221	WB	3		0	18	21	9.8	0.76
Umatilla River	PCBs	Aroclor 1232	FS	4		0	18	19	9.3	0.29
Umatilla River	PCBs	Aroclor 1232	WB	3		0	18	21	9.8	0.76
Umatilla River	PCBs	Aroclor 1242	FS	4		0	18	19	9.3	0.29
Umatilla River	PCBs	Aroclor 1242	WB	3		0	18	21	9.8	0.76
Umatilla River	PCBs	Aroclor 1248	FS	4		0	18	19	9.3	0.29
Umatilla River	PCBs	Aroclor 1248	WB	3		0	18	21	9.8	0.76
Umatilla River	PCBs	Aroclor 1254	FS	4		1	10	19	9.4	0.48
Umatilla River	PCBs	Aroclor 1254	WB	3		0	18	21	9.8	0.76
Umatilla River	PCBs	Aroclor 1260	FS	4		3	11	30	16	9.6
Umatilla River	PCBs	Aroclor 1260	WB	3		3	12	18	14	3.2
Umatilla River	PCBs	PCB 077	FS	4		4	0.014	0.022	0.018	0.0032
Umatilla River	PCBs	PCB 077	WB	3		3	0.032	0.040	0.035	0.0039
Umatilla River	PCBs	PCB 105	FS	4		4	0.27	0.61	0.42	0.15
Umatilla River	PCBs	PCB 105	WB	3		3	0.34	0.40	0.36	0.032
Umatilla River	PCBs	PCB 114	FS	4		4	0.025	0.055	0.038	0.013
Umatilla River	PCBs	PCB 114	WB	3		3	0.026	0.029	0.028	0.0017

Appendix D-2: Tributary Summary Statistics
Largescale Sucker

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples		Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	PCBs	PCB 118	FS	4		4	0.63	1.2	0.89	0.23
Umatilla River	PCBs	PCB 118	WB	3		3	0.71	0.84	0.76	0.070
Umatilla River	PCBs	PCB 123	FS	4		4	0.012	0.026	0.018	0.0059
Umatilla River	PCBs	PCB 123	WB	3		3	0.012	0.017	0.014	0.0025
Umatilla River	PCBs	PCB 126	FS	4		0	0.0014	0.0024	0.00100	0.00022
Umatilla River	PCBs	PCB 126	WB	3		0	0.00026	0.00066	0.00024	0.00010
Umatilla River	PCBs	PCB 156	FS	4		4	0.14	0.34	0.21	0.090
Umatilla River	PCBs	PCB 156	WB	3		3	0.15	0.19	0.17	0.020
Umatilla River	PCBs	PCB 157	FS	4		0	0.0011	0.0021	0.00074	0.00021
Umatilla River	PCBs	PCB 157	WB	3		0	0.00087	0.0043	0.0010	0.00098
Umatilla River	PCBs	PCB 167	FS	4		4	0.062	0.17	0.10	0.049
Umatilla River	PCBs	PCB 167	WB	3		3	0.067	0.091	0.078	0.012
Umatilla River	PCBs	PCB 169	FS	4		0	0.00081	0.0011	0.00049	0.000078
Umatilla River	PCBs	PCB 169	WB	3		0	0.00093	0.0025	0.00086	0.00038
Umatilla River	PCBs	PCB 170	FS	4		4	0.34	0.68	0.46	0.15
Umatilla River	PCBs	PCB 170	WB	3		3	0.32	0.47	0.40	0.078
Umatilla River	PCBs	PCB 180	FS	4		4	1.1	2.3	1.6	0.56
Umatilla River	PCBs	PCB 180	WB	3		3	0.91	1.6	1.2	0.34
Umatilla River	PCBs	PCB 189	FS	4		4	0.014	0.029	0.020	0.0068
Umatilla River	PCBs	PCB 189	WB	3		3	0.014	0.022	0.018	0.0039
Umatilla River	Pesticides	Aldrin	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	Aldrin	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	Alpha-BHC	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	Alpha-BHC	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	Alpha-Chlordane	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	Alpha-Chlordane	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	Beta-BHC	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	Beta-BHC	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	cis-Nonachlor	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	cis-Nonachlor	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	DDD-o,p'	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	DDD-o,p'	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	DDE-o,p'	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	DDE-o,p'	WB	3		3	3.7	5.5	4.9	1.0
Umatilla River	Pesticides	DDT-o,p'	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	DDT-o,p'	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	DDD-p,p'	FS	4		4	2.7	9.7	5.9	3.2
Umatilla River	Pesticides	DDD-p,p'	WB	3		3	5.0	12	8.5	3.5
Umatilla River	Pesticides	DDE-p,p'	FS	4		4	34	100	63	29
Umatilla River	Pesticides	DDE-p,p'	WB	3		3	28	51	42	13
Umatilla River	Pesticides	DDT-p,p'	FS	4		3	2.2	3.8	2.7	1.2
Umatilla River	Pesticides	DDT-p,p'	WB	3		3	2.0	5.4	3.6	1.7
Umatilla River	Pesticides	DDMU	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	DDMU	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	Delta-BHC	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	Delta-BHC	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	Endosulfan Sulfate	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	Endosulfan Sulfate	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	Gamma-Chlordane	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	Gamma-Chlordane	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	Gamma-Chlordane	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	Gamma-Chlordane	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	Heptachlor	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	Heptachlor	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	Heptachlor Epoxide	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	Heptachlor Epoxide	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	Hexachlorobenzene	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	Hexachlorobenzene	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	Lindane	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	Lindane	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	Mirex	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	Mirex	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	Oxychlordane	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	Oxychlordane	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	Pentachloroanisole	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	Pentachloroanisole	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Pesticides	Toxaphene	FS	4		0	54	68	30	3.1
Umatilla River	Pesticides	Toxaphene	WB	3		0	74	80	38	1.6
Umatilla River	Pesticides	trans-Nonachlor	FS	4		0	2.2	2.4	1.2	0.041
Umatilla River	Pesticides	trans-Nonachlor	WB	3		0	2.5	2.7	1.3	0.058
Umatilla River	Semivolatiles	1,2,4-Trichlorobenzene	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3		0	4.7	10	3.4	1.4
Umatilla River	Semivolatiles	1,2-Diphenylhydrazine	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	1,2-Diphenylhydrazine	WB	3		0	4.7	10	3.4	1.4

Appendix D-2: Tributary Summary Statistics
Largescale Sucker

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples		Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Semivolatiles	2,4-Dinitrotoluene	FS	4		0	9.4	10	5.0	0.25
Umatilla River	Semivolatiles	2,4-Dinitrotoluene	WB	3		0	9.3	20	6.8	2.9
Umatilla River	Semivolatiles	2,6-Dinitrotoluene	FS	4		0	19	21	10	0.51
Umatilla River	Semivolatiles	2,6-Dinitrotoluene	WB	3		0	19	40	14	5.7
Umatilla River	Semivolatiles	2-Chloronaphthalene	FS	4		0	9.4	10	5.0	0.25
Umatilla River	Semivolatiles	2-Chloronaphthalene	WB	3		0	9.3	20	6.8	2.9
Umatilla River	Semivolatiles	4-Bromophenyl-Phenylether	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3		0	4.7	10	3.4	1.4
Umatilla River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3		0	4.7	10	3.4	1.4
Umatilla River	Semivolatiles	Acenaphthene	FS	4		0	9.4	10	5.0	0.25
Umatilla River	Semivolatiles	Acenaphthene	WB	3		0	9.3	20	6.8	2.9
Umatilla River	Semivolatiles	Acenaphthylene	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	Acenaphthylene	WB	3		0	4.7	10	3.4	1.4
Umatilla River	Semivolatiles	Anthracene	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	Anthracene	WB	3		0	4.7	10	3.4	1.4
Umatilla River	Semivolatiles	Benzene, 1,2-dichloro-	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3		0	4.7	10	3.4	1.4
Umatilla River	Semivolatiles	Benzene, 1,3-dichloro-	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3		0	4.7	10	3.4	1.4
Umatilla River	Semivolatiles	Benzene, 1,4-dichloro-	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3		0	4.7	10	3.4	1.4
Umatilla River	Semivolatiles	Benzo(a)anthracene	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	Benzo(a)anthracene	WB	3		0	4.7	10	3.4	1.4
Umatilla River	Semivolatiles	Benzo(a)pyrene	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	Benzo(a)pyrene	WB	3		0	4.7	10	3.4	1.4
Umatilla River	Semivolatiles	Benzo(g,h,i)perylene	FS	4		0	9.4	10	5.0	0.25
Umatilla River	Semivolatiles	Benzo(g,h,i)perylene	WB	3		0	9.3	20	6.8	2.9
Umatilla River	Semivolatiles	Benzo[b]Fluoranthene	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	Benzo[b]Fluoranthene	WB	3		0	4.7	10	3.4	1.4
Umatilla River	Semivolatiles	Benzo[k]fluoranthene	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	Benzo[k]fluoranthene	WB	3		0	4.7	10	3.4	1.4
Umatilla River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	4		0	9.4	10	5.0	0.25
Umatilla River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3		0	9.3	20	6.8	2.9
Umatilla River	Semivolatiles	Chrysene	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	Chrysene	WB	3		0	4.7	10	3.4	1.4
Umatilla River	Semivolatiles	Dibenz[a,h]anthracene	FS	4		0	9.4	10	5.0	0.25
Umatilla River	Semivolatiles	Dibenz[a,h]anthracene	WB	3		0	9.3	20	6.8	2.9
Umatilla River	Semivolatiles	Dibenzofuran	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	Dibenzofuran	WB	3		0	4.7	10	3.4	1.4
Umatilla River	Semivolatiles	Fluoranthene	FS	4		0	9.4	10	5.0	0.25
Umatilla River	Semivolatiles	Fluoranthene	WB	3		0	9.3	20	6.8	2.9
Umatilla River	Semivolatiles	9H-Fluorene	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	9H-Fluorene	WB	3		0	4.7	10	3.4	1.4
Umatilla River	Semivolatiles	Hexachlorobutadiene	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	Hexachlorobutadiene	WB	3		0	4.7	10	3.4	1.4
Umatilla River	Semivolatiles	Hexachloroethane	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	Hexachloroethane	WB	3		0	4.7	10	3.4	1.4
Umatilla River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	4		0	9.4	10	5.0	0.25
Umatilla River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3		0	9.3	20	6.8	2.9
Umatilla River	Semivolatiles	Naphthalene	FS	4		0	6.4	14	5.2	1.8
Umatilla River	Semivolatiles	Naphthalene	WB	3		0	12	21	7.9	2.3
Umatilla River	Semivolatiles	Naphthalene, 1-methyl-	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	Naphthalene, 1-methyl-	WB	3		1	5.7	10	5.5	2.9
Umatilla River	Semivolatiles	Naphthalene, 2-methyl-	FS	4		2	5.4	7.5	4.9	2.4
Umatilla River	Semivolatiles	Naphthalene, 2-methyl-	WB	3		2	9.2	18	11	6.4
Umatilla River	Semivolatiles	Nitrobenzene	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	Nitrobenzene	WB	3		0	4.7	10	3.4	1.4
Umatilla River	Semivolatiles	Phenanthrene	FS	4		0	4.7	5.2	2.5	0.12
Umatilla River	Semivolatiles	Phenanthrene	WB	3		1	4.8	10	4.2	1.2
Umatilla River	Semivolatiles	Pyrene	FS	4		0	9.4	10	5.0	0.25
Umatilla River	Semivolatiles	Pyrene	WB	3		0	9.3	20	6.8	2.9
Umatilla River	Semivolatiles	Retene	FS	4		0	9.4	10	5.0	0.25
Umatilla River	Semivolatiles	Retene	WB	3		0	9.3	20	6.8	2.9
Yakima River	Dioxin/furans	2,3,7,8-TCDD	FS	6		3	0.000010	0.000040	0.000025	0.000017
Yakima River	Dioxin/furans	2,3,7,8-TCDD	WB	9		7	0.000010	0.00010	0.000064	0.000036
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	6		3	0.000010	0.00018	0.000071	0.000073
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	9		7	0.000010	0.00023	0.00014	0.000079
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	6		1	0.000010	0.000090	0.000024	0.000033
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	9		8	0.000010	0.00014	0.000087	0.000049
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	6		5	0.000030	0.00014	0.000069	0.000041
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	9		6	0.000010	0.00021	0.000087	0.000073
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	6		3	0.000010	0.000050	0.000023	0.000018
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	9		6	0.000010	0.000070	0.000031	0.000024
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	6		3	0.000010	0.00015	0.000059	0.000069
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	9		9	0.00018	0.00046	0.00029	0.00010

Appendix D-2: Tributary Summary Statistics
Largescale Sucker

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples		Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Dioxin/furans	OCDD	FS	6	5	0.000040	0.00054	0.00023	0.00017	
Yakima River	Dioxin/furans	OCDD	WB	9	9	0.00031	0.00095	0.00066	0.00024	
Yakima River	Dioxin/furans	2,3,7,8-TCDF	FS	6	6	0.000090	0.00038	0.00020	0.00014	
Yakima River	Dioxin/furans	2,3,7,8-TCDF	WB	9	9	0.00018	0.00071	0.00044	0.00019	
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	6	3	0.000020	0.000080	0.000031	0.000027	
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	9	8	0.000010	0.000060	0.000038	0.000016	
Yakima River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	6	3	0.000020	0.00010	0.000031	0.000035	
Yakima River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	9	9	0.000030	0.00019	0.00010	0.000052	
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	6	3	0.000010	0.000080	0.000024	0.000028	
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	9	7	0.000010	0.000030	0.000018	0.000011	
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	6	3	0.000010	0.00010	0.000031	0.000035	
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	9	6	0.000010	0.000040	0.000021	0.000013	
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	6	2	0.000010	0.00020	0.000050	0.000076	
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	9	6	0.000010	0.000060	0.000039	0.000026	
Yakima River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	6	3	0.000010	0.00023	0.000091	0.000093	
Yakima River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	9	6	0.000010	0.00015	0.000098	0.000070	
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	6	2	0.000020	0.00019	0.000058	0.000073	
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	9	7	0.000010	0.00012	0.000074	0.000038	
Yakima River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	6	1	0.000010	0.00019	0.000043	0.000073	
Yakima River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	9	0	0.000010	0.000050	0.0000083	0.0000071	
Yakima River	Dioxin/furans	OCDF	FS	6	2	0.000010	0.00030	0.000074	0.00011	
Yakima River	Dioxin/furans	OCDF	WB	9	7	0.000010	0.00011	0.000059	0.000037	
Yakima River	Guaiacols/Phenols	4-Chloroguaiacol	FS	6	0	480	930	330	96	
Yakima River	Guaiacols/Phenols	4-Chloroguaiacol	WB	9	0	470	940	320	97	
Yakima River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	6	0	480	930	330	96	
Yakima River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	9	0	470	940	320	97	
Yakima River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	6	0	480	930	330	96	
Yakima River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	9	0	470	940	320	97	
Yakima River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	6	0	480	930	330	96	
Yakima River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	9	0	470	940	320	97	
Yakima River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	6	0	480	930	330	96	
Yakima River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	9	0	470	940	320	97	
Yakima River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	6	0	190	370	130	38	
Yakima River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	9	0	190	380	130	39	
Yakima River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	6	0	480	930	330	96	
Yakima River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	9	0	470	940	320	97	
Yakima River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	6	0	190	370	130	38	
Yakima River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	9	0	190	380	130	39	
Yakima River	Guaiacols/Phenols	2-Chlorophenol	FS	6	0	190	370	130	38	
Yakima River	Guaiacols/Phenols	2-Chlorophenol	WB	9	0	190	380	130	39	
Yakima River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	6	0	190	370	130	38	
Yakima River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	9	0	190	380	130	39	
Yakima River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	6	0	190	370	130	38	
Yakima River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	9	0	190	380	130	39	
Yakima River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	6	0	480	930	330	96	
Yakima River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	9	0	470	940	320	97	
Yakima River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	6	0	190	370	130	38	
Yakima River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	6	0	190	380	140	43	
Yakima River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	6	0	190	370	130	38	
Yakima River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	9	0	190	380	130	39	
Yakima River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	6	0	190	370	130	38	
Yakima River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	6	0	190	380	140	43	
Yakima River	Guaiacols/Phenols	Pentachlorophenol	FS	6	0	190	370	130	38	
Yakima River	Guaiacols/Phenols	Pentachlorophenol	WB	9	0	190	380	130	39	
Yakima River	Guaiacols/Phenols	Phenol	FS	6	0	190	370	130	38	
Yakima River	Guaiacols/Phenols	Phenol	WB	9	0	190	380	130	39	
Yakima River	Metals	Aluminum	FS	6	3	580	20,000	3,000	3,600	
Yakima River	Metals	Aluminum	WB	9	9	28,000	61,000	46,000	9,300	
Yakima River	Metals	Antimony	FS	6	0	50	50	25	0.00	
Yakima River	Metals	Antimony	WB	9	0	50	50	25	0.00	
Yakima River	Metals	Arsenic	FS	6	4	50	63	47	17	
Yakima River	Metals	Arsenic	WB	9	9	74	150	100	21	
Yakima River	Metals	Barium	FS	6	6	290	780	590	200	
Yakima River	Metals	Barium	WB	9	9	1,100	2,100	1,700	300	
Yakima River	Metals	Beryllium	FS	6	1	4.0	6.0	2.7	1.6	
Yakima River	Metals	Beryllium	WB	9	4	4.0	7.0	3.9	2.3	
Yakima River	Metals	Cadmium	FS	6	0	4.0	4.0	2.0	0.00	
Yakima River	Metals	Cadmium	WB	9	9	17	39	24	7.0	
Yakima River	Metals	Chromium	FS	6	2	100	150	78	45	
Yakima River	Metals	Chromium	WB	9	9	160	280	230	45	
Yakima River	Metals	Cobalt	FS	6	6	21	120	53	43	
Yakima River	Metals	Cobalt	WB	9	9	79	180	120	40	
Yakima River	Metals	Copper	FS	6	6	500	670	590	56	
Yakima River	Metals	Copper	WB	9	9	940	1,500	1,200	190	
Yakima River	Metals	Lead	FS	6	6	10	26	16	5.6	
Yakima River	Metals	Lead	WB	9	9	27	75	52	18	

Appendix D-2: Tributary Summary Statistics
Largescale Sucker

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples		Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Metals	Manganese	FS	6	6	6	1,900	3,600	2,800	690
Yakima River	Metals	Manganese	WB	9	9	9	11,000	19,000	15,000	2,900
Yakima River	Metals	Mercury	FS	6	6	6	160	350	250	73
Yakima River	Metals	Mercury	WB	9	9	9	59	250	140	63
Yakima River	Metals	Nickel	FS	6	6	6	49	98	65	18
Yakima River	Metals	Nickel	WB	9	9	9	280	550	430	99
Yakima River	Metals	Selenium	FS	6	6	6	130	310	220	77
Yakima River	Metals	Selenium	WB	9	9	9	180	490	300	87
Yakima River	Metals	Silver	FS	6	0	0	100	100	50	0.00
Yakima River	Metals	Silver	WB	9	0	0	100	100	50	0.00
Yakima River	Metals	Thallium	FS	6	0	0	50	50	25	0.00
Yakima River	Metals	Thallium	WB	9	0	0	50	50	25	0.00
Yakima River	Metals	Vanadium	FS	6	1	1	10	20	7.7	4.5
Yakima River	Metals	Vanadium	WB	9	9	9	160	370	250	64
Yakima River	Metals	Zinc	FS	6	6	6	18,000	21,000	19,000	1,100
Yakima River	Metals	Zinc	WB	9	9	9	21,000	25,000	22,000	1,400
Yakima River	PCBs	Aroclor 1016	FS	6	0	0	18	21	9.9	0.49
Yakima River	PCBs	Aroclor 1016	WB	9	0	0	17	22	9.7	0.71
Yakima River	PCBs	Aroclor 1221	FS	6	0	0	18	21	9.9	0.49
Yakima River	PCBs	Aroclor 1221	WB	9	0	0	17	22	9.7	0.71
Yakima River	PCBs	Aroclor 1232	FS	6	0	0	18	21	9.9	0.49
Yakima River	PCBs	Aroclor 1232	WB	9	0	0	17	22	9.7	0.71
Yakima River	PCBs	Aroclor 1242	FS	6	0	0	18	21	9.9	0.49
Yakima River	PCBs	Aroclor 1242	WB	9	0	0	17	22	9.7	0.71
Yakima River	PCBs	Aroclor 1248	FS	6	0	0	18	21	9.9	0.49
Yakima River	PCBs	Aroclor 1248	WB	9	0	0	17	22	9.7	0.71
Yakima River	PCBs	Aroclor 1254	FS	6	5	5	13	46	21	13
Yakima River	PCBs	Aroclor 1254	WB	9	9	9	23	46	34	8.0
Yakima River	PCBs	Aroclor 1260	FS	6	4	4	18	75	41	26
Yakima River	PCBs	Aroclor 1260	WB	9	8	8	16	100	56	35
Yakima River	PCBs	PCB 077	FS	6	6	6	0.0074	0.032	0.017	0.010
Yakima River	PCBs	PCB 077	WB	9	9	9	0.017	0.044	0.032	0.0085
Yakima River	PCBs	PCB 105	FS	6	6	6	0.23	0.71	0.48	0.19
Yakima River	PCBs	PCB 105	WB	9	9	9	0.51	1.3	0.94	0.24
Yakima River	PCBs	PCB 114	FS	6	6	6	0.018	0.054	0.036	0.013
Yakima River	PCBs	PCB 114	WB	9	9	9	0.053	0.11	0.075	0.018
Yakima River	PCBs	PCB 118	FS	6	6	6	0.53	2.1	1.2	0.54
Yakima River	PCBs	PCB 118	WB	9	9	9	0.85	2.8	2.0	0.76
Yakima River	PCBs	PCB 123	FS	6	6	6	0.0098	0.024	0.018	0.0058
Yakima River	PCBs	PCB 123	WB	9	9	9	0.028	0.046	0.038	0.0060
Yakima River	PCBs	PCB 126	FS	6	2	2	0.0011	0.0019	0.00097	0.00051
Yakima River	PCBs	PCB 126	WB	9	3	3	0.0012	0.0061	0.0024	0.0018
Yakima River	PCBs	PCB 156	FS	6	6	6	0.097	0.61	0.33	0.20
Yakima River	PCBs	PCB 156	WB	9	9	9	0.43	0.75	0.59	0.11
Yakima River	PCBs	PCB 157	FS	6	6	6	0.0011	0.082	0.047	0.033
Yakima River	PCBs	PCB 157	WB	9	6	6	0.0037	0.12	0.071	0.052
Yakima River	PCBs	PCB 167	FS	6	6	6	0.043	0.33	0.17	0.11
Yakima River	PCBs	PCB 167	WB	9	9	9	0.20	0.38	0.28	0.066
Yakima River	PCBs	PCB 169	FS	6	0	0	0.00053	0.0035	0.00096	0.00070
Yakima River	PCBs	PCB 169	WB	9	0	0	0.00080	0.021	0.0022	0.0031
Yakima River	PCBs	PCB 170	FS	6	6	6	0.13	2.3	0.98	0.90
Yakima River	PCBs	PCB 170	WB	9	9	9	0.49	2.5	1.3	0.75
Yakima River	PCBs	PCB 180	FS	6	6	6	0.37	8.6	3.6	3.5
Yakima River	PCBs	PCB 180	WB	9	9	9	1.4	8.0	4.1	2.5
Yakima River	PCBs	PCB 189	FS	6	6	6	0.0049	0.11	0.046	0.043
Yakima River	PCBs	PCB 189	WB	9	9	9	0.022	0.11	0.064	0.034
Yakima River	Pesticides	Aldrin	FS	6	0	0	2.0	2.6	1.1	0.14
Yakima River	Pesticides	Aldrin	WB	9	0	0	1.7	5.0	1.3	0.49
Yakima River	Pesticides	Alpha-BHC	FS	6	0	0	2.0	2.6	1.1	0.14
Yakima River	Pesticides	Alpha-BHC	WB	9	0	0	1.7	5.0	1.3	0.49
Yakima River	Pesticides	Alpha-Chlordene	FS	6	0	0	2.0	2.6	1.1	0.14
Yakima River	Pesticides	Alpha-Chlordene	WB	9	0	0	1.7	5.0	1.3	0.49
Yakima River	Pesticides	Beta-BHC	FS	6	0	0	2.0	2.6	1.1	0.14
Yakima River	Pesticides	Beta-BHC	WB	9	0	0	1.7	5.0	1.3	0.49
Yakima River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	6	2	2	1.2	2.6	1.2	0.12
Yakima River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	9	0	0	1.7	5.0	1.3	0.49
Yakima River	Pesticides	cis-Nonachlor	FS	6	0	0	2.0	2.6	1.1	0.14
Yakima River	Pesticides	cis-Nonachlor	WB	9	2	2	1.9	17	4.1	5.6
Yakima River	Pesticides	DDD-o,p'	FS	6	4	4	2.2	12	5.1	4.0
Yakima River	Pesticides	DDD-o,p'	WB	9	8	8	2.2	16	7.1	5.0
Yakima River	Pesticides	DDE-o,p'	FS	6	4	4	2.2	4.4	2.8	1.5
Yakima River	Pesticides	DDE-o,p'	WB	9	8	8	3.2	9.3	5.2	1.9
Yakima River	Pesticides	DDT-o,p'	FS	6	3	3	2.2	12	5.0	4.5
Yakima River	Pesticides	DDT-o,p'	WB	9	1	1	1.7	17	3.1	5.3
Yakima River	Pesticides	DDD-p,p'	FS	6	6	6	2.1	91	26	33
Yakima River	Pesticides	DDD-p,p'	WB	9	9	9	11	140	60	43

Appendix D-2: Tributary Summary Statistics
Largescale Sucker

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples		Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Pesticides	DDE-p,p'	FS	6		6	36	740	400	300
Yakima River	Pesticides	DDE-p,p'	WB	9		9	130	1,300	650	430
Yakima River	Pesticides	DDT-p,p'	FS	6		6	10	92	49	34
Yakima River	Pesticides	DDT-p,p'	WB	9		9	29	180	70	48
Yakima River	Pesticides	DDMU	FS	6		3	2.2	19	7.6	7.5
Yakima River	Pesticides	DDMU	WB	9		6	2.4	40	15	13
Yakima River	Pesticides	Delta-BHC	FS	6		0	2.0	2.6	1.1	0.14
Yakima River	Pesticides	Delta-BHC	WB	9		0	1.7	5.0	1.3	0.49
Yakima River	Pesticides	Endosulfan Sulfate	FS	6		3	1.6	2.6	1.6	0.48
Yakima River	Pesticides	Endosulfan Sulfate	WB	9		2	1.7	6.5	2.0	1.8
Yakima River	Pesticides	Gamma-Chlordane	FS	6		0	2.0	2.6	1.1	0.14
Yakima River	Pesticides	Gamma-Chlordane	WB	9		0	1.7	5.0	1.3	0.49
Yakima River	Pesticides	Gamma-Chlordene	FS	6		0	2.0	2.6	1.1	0.14
Yakima River	Pesticides	Gamma-Chlordene	WB	9		0	1.7	5.0	1.3	0.49
Yakima River	Pesticides	Heptachlor	FS	6		0	2.0	2.6	1.1	0.14
Yakima River	Pesticides	Heptachlor	WB	9		0	1.7	5.0	1.3	0.49
Yakima River	Pesticides	Heptachlor Epoxide	FS	6		0	2.0	2.6	1.1	0.14
Yakima River	Pesticides	Heptachlor Epoxide	WB	9		0	1.7	5.0	1.3	0.49
Yakima River	Pesticides	Hexachlorobenzene	FS	6		0	2.0	2.6	1.1	0.14
Yakima River	Pesticides	Hexachlorobenzene	WB	9		1	1.2	5.0	1.3	0.48
Yakima River	Pesticides	Lindane	FS	6		0	2.0	2.6	1.1	0.14
Yakima River	Pesticides	Lindane	WB	9		0	1.7	5.0	1.3	0.49
Yakima River	Pesticides	Mirex	FS	6		1	1.3	2.6	1.2	0.14
Yakima River	Pesticides	Mirex	WB	9		1	1.7	5.0	1.4	0.52
Yakima River	Pesticides	Oxychlordane	FS	6		0	2.0	2.6	1.1	0.14
Yakima River	Pesticides	Oxychlordane	WB	9		1	0.97	5.0	1.3	0.49
Yakima River	Pesticides	Pentachloroanisol	FS	6		2	0.98	2.6	1.1	0.12
Yakima River	Pesticides	Pentachloroanisol	WB	9		4	0.88	5.0	1.3	0.48
Yakima River	Pesticides	Toxaphene	FS	6			54	63	30	1.5
Yakima River	Pesticides	Toxaphene	WB	9		0	52	81	32	5.4
Yakima River	Pesticides	trans-Nonachlor	FS	6		3	2.2	4.2	2.2	1.2
Yakima River	Pesticides	trans-Nonachlor	WB	9			2.4	8.3	3.1	2.8
Yakima River	Semivolatiles	1,2,4-Trichlorobenzene	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	1,2,4-Trichlorobenzene	WB	9		0	4.8	26	6.6	4.7
Yakima River	Semivolatiles	1,2-Diphenylhydrazine	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	1,2-Diphenylhydrazine	WB	9		1	4.8	120	19	39
Yakima River	Semivolatiles	2,4-Dinitrotoluene	FS	6		0	9.6	19	6.7	1.9
Yakima River	Semivolatiles	2,4-Dinitrotoluene	WB	9		0	9.6	53	13	9.3
Yakima River	Semivolatiles	2,6-Dinitrotoluene	FS	6		0	19	37	13	3.8
Yakima River	Semivolatiles	2,6-Dinitrotoluene	WB	9		0	19	110	26	19
Yakima River	Semivolatiles	2-Chloronaphthalene	FS	6		0	9.6	19	6.7	1.9
Yakima River	Semivolatiles	2-Chloronaphthalene	WB	9		0	9.6	53	13	9.3
Yakima River	Semivolatiles	4-Bromophenyl-Phenylether	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	4-Bromophenyl-Phenylether	WB	9		0	4.8	26	6.6	4.7
Yakima River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	9		0	4.8	26	6.6	4.7
Yakima River	Semivolatiles	Acenaphthene	FS	6		0	9.6	19	6.7	1.9
Yakima River	Semivolatiles	Acenaphthene	WB	9		0	9.6	53	13	9.3
Yakima River	Semivolatiles	Acenaphthylene	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	Acenaphthylene	WB	9		0	4.8	26	6.6	4.7
Yakima River	Semivolatiles	Anthracene	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	Anthracene	WB	9		0	4.8	26	6.6	4.7
Yakima River	Semivolatiles	Benzene, 1,2-dichloro-	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	Benzene, 1,2-dichloro-	WB	9		0	4.8	26	6.6	4.7
Yakima River	Semivolatiles	Benzene, 1,3-dichloro-	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	Benzene, 1,3-dichloro-	WB	9		0	4.8	26	6.6	4.7
Yakima River	Semivolatiles	Benzene, 1,4-dichloro-	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	Benzene, 1,4-dichloro-	WB	9		0	4.8	26	6.6	4.7
Yakima River	Semivolatiles	Benzo(a)anthracene	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	Benzo(a)anthracene	WB	9		0	4.8	26	6.6	4.7
Yakima River	Semivolatiles	Benzo(a)pyrene	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	Benzo(a)pyrene	WB	9		0	4.8	26	6.6	4.7
Yakima River	Semivolatiles	Benzo(g,h,i)perylene	FS	6		0	9.6	19	6.7	1.9
Yakima River	Semivolatiles	Benzo(g,h,i)perylene	WB	9		0	9.6	53	13	9.3
Yakima River	Semivolatiles	Benzo[b]fluoranthene	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	Benzo[b]fluoranthene	WB	9		0	4.8	26	6.6	4.7
Yakima River	Semivolatiles	Benzo[k]fluoranthene	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	Benzo[k]fluoranthene	WB	9		0	4.8	26	6.6	4.7
Yakima River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	6		0	9.6	19	6.7	1.9
Yakima River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	9		0	9.6	53	13	9.3
Yakima River	Semivolatiles	Chrysene	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	Chrysene	WB	9		0	4.8	26	6.6	4.7
Yakima River	Semivolatiles	Dibenz[a,h]anthracene	FS	6		0	9.6	19	6.7	1.9
Yakima River	Semivolatiles	Dibenz[a,h]anthracene	WB	9		0	9.6	53	13	9.3
Yakima River	Semivolatiles	Dibenzofuran	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	Dibenzofuran	WB	9		0	4.8	26	6.6	4.7

Appendix D-2: Tributary Summary Statistics
Largescale Sucker

Tributary	Chemical Group	Chemical	Sample Type	Number of		Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
				of	Samples					
Yakima River	Semivolatiles	Fluoranthene	FS	6		0	9.6	19	6.7	1.9
Yakima River	Semivolatiles	Fluoranthene	WB	9		0	9.6	53	13	9.3
Yakima River	Semivolatiles	9H-Fluorene	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	9H-Fluorene	WB	9		0	4.8	26	6.6	4.7
Yakima River	Semivolatiles	Hexachlorobutadiene	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	Hexachlorobutadiene	WB	9		0	4.8	26	6.6	4.7
Yakima River	Semivolatiles	Hexachloroethane	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	Hexachloroethane	WB	9		0	4.8	26	6.6	4.7
Yakima River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	6		0	9.6	19	6.7	1.9
Yakima River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	9		0	9.6	53	13	9.3
Yakima River	Semivolatiles	Naphthalene	FS	6		0	5.4	15	5.4	1.9
Yakima River	Semivolatiles	Naphthalene	WB	9		1	6.2	67	14	20
Yakima River	Semivolatiles	Naphthalene, 1-methyl-	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	Naphthalene, 1-methyl-	WB	9		1	4.9	26	6.9	4.4
Yakima River	Semivolatiles	Naphthalene, 2-methyl-	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	Naphthalene, 2-methyl-	WB	9		3	7.9	26	9.1	3.7
Yakima River	Semivolatiles	Nitrobenzene	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	Nitrobenzene	WB	9		0	4.8	26	6.6	4.7
Yakima River	Semivolatiles	Phenanthrene	FS	6		0	4.8	9.3	3.4	0.97
Yakima River	Semivolatiles	Phenanthrene	WB	9		0	4.8	26	6.6	4.7
Yakima River	Semivolatiles	Pyrene	FS	6		0	9.6	19	6.7	1.9
Yakima River	Semivolatiles	Pyrene	WB	9		0	9.6	53	13	9.3
Yakima River	Semivolatiles	Retene	FS	6		0	9.6	19	6.7	1.9
Yakima River	Semivolatiles	Retene	WB	9		0	9.6	53	13	9.3

Appendix D-2: Tributary Summary Statistics
Mountain Whitefish

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Dioxin/furans	2,3,7,8-TCDD	FS	3	3	0.00020	0.00021	0.00021	0.0000058
Columbia River	Dioxin/furans	2,3,7,8-TCDD	WB	3	3	0.00015	0.00021	0.00017	0.000032
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	3	0.00017	0.00018	0.00017	0.0000058
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	2	0.000020	0.00019	0.00012	0.000099
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	3	0.000030	0.000040	0.000033	0.0000058
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	1	0.000010	0.000090	0.000035	0.000048
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.00012	0.00013	0.00012	0.0000058
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	1	0.000010	0.00011	0.000047	0.000056
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000010	0.000060	0.000042	0.000032
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	1	0.000020	0.00011	0.000048	0.000054
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000010	0.00015	0.00010	0.000084
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00013	0.00033	0.00025	0.00011
Columbia River	Dioxin/furans	OCDD	FS	3	3	0.00019	0.00028	0.00023	0.000047
Columbia River	Dioxin/furans	OCDD	WB	3	2	0.000010	0.00076	0.00033	0.00039
Columbia River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.013	0.014	0.013	0.00038
Columbia River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.0090	0.012	0.011	0.0014
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.00012	0.00014	0.00013	0.000010
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.00011	0.00026	0.00016	0.000087
Columbia River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00026	0.00035	0.00029	0.000049
Columbia River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00025	0.00036	0.00030	0.000056
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	3	0.000030	0.000040	0.000037	0.0000058
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	2	0.000020	0.000060	0.000033	0.000025
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	2	0.000010	0.000030	0.000018	0.000013
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	2	0.000020	0.000040	0.000023	0.000015
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	1	0.000010	0.000020	0.000010	0.0000087
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	1	0.000010	0.000020	0.000012	0.0000076
Columbia River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Columbia River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.000030	0.000070	0.000047	0.000021
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000020	0.000030	0.000012	0.0000029
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000010	0.00013	0.000027	0.000033
Columbia River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000020	0.000030	0.000012	0.0000029
Columbia River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	1	0.000020	0.00013	0.000038	0.000028
Columbia River	Dioxin/furans	OCDF	FS	3	2	0.000010	0.000050	0.000032	0.000024
Columbia River	Dioxin/furans	OCDF	WB	3	2	0.000040	0.00020	0.00010	0.000086
Columbia River	Guaiacols/Pher	4-Chloroguaiacol	FS	3	0	920	980	480	16
Columbia River	Guaiacols/Pher	4-Chloroguaiacol	WB	3	0	890	990	470	26
Columbia River	Guaiacols/Pher	3,4-Dichloroguaiacol	FS	3	0	920	980	480	16
Columbia River	Guaiacols/Pher	3,4-Dichloroguaiacol	WB	3	0	890	990	470	26
Columbia River	Guaiacols/Pher	4,5-Dichloroguaiacol	FS	3	0	920	980	480	16
Columbia River	Guaiacols/Pher	4,5-Dichloroguaiacol	WB	3	0	890	990	470	26
Columbia River	Guaiacols/Pher	4,6-Dichloroguaiacol	FS	3	0	920	980	480	16
Columbia River	Guaiacols/Pher	4,6-Dichloroguaiacol	WB	3	0	890	990	470	26
Columbia River	Guaiacols/Pher	3,4,5-Trichloroguaiacol	FS	3	0	920	980	480	16
Columbia River	Guaiacols/Pher	3,4,5-Trichloroguaiacol	WB	3	0	890	990	470	26
Columbia River	Guaiacols/Pher	3,4,6-Trichloroguaiacol	FS	3	0	370	390	190	6.3
Columbia River	Guaiacols/Pher	3,4,6-Trichloroguaiacol	WB	3	0	360	400	190	10
Columbia River	Guaiacols/Pher	4,5,6-Trichloroguaiacol	FS	3	0	920	980	480	16
Columbia River	Guaiacols/Pher	4,5,6-Trichloroguaiacol	WB	3	0	890	990	470	26
Columbia River	Guaiacols/Pher	Tetrachloroguaiacol	FS	3	0	370	390	190	6.3
Columbia River	Guaiacols/Pher	Tetrachloroguaiacol	WB	3	0	360	400	190	10
Columbia River	Guaiacols/Pher	2-Chlorophenol	FS	3	0	370	390	190	6.3
Columbia River	Guaiacols/Pher	2-Chlorophenol	WB	3	0	360	400	190	10
Columbia River	Guaiacols/Pher	4-Chloro-3-methylphenol	FS	3	0	370	390	190	6.3
Columbia River	Guaiacols/Pher	4-Chloro-3-methylphenol	WB	3	0	360	400	190	10
Columbia River	Guaiacols/Pher	2,4-Dichlorophenol	FS	3	0	370	390	190	6.3
Columbia River	Guaiacols/Pher	2,4-Dichlorophenol	WB	3	0	360	400	190	10
Columbia River	Guaiacols/Pher	2,4-Dimethylphenol	FS	3	0	920	980	480	16
Columbia River	Guaiacols/Pher	2,4-Dimethylphenol	WB	3	0	890	990	470	26
Columbia River	Guaiacols/Pher	2,4,5-Trichlorophenol	FS	3	0	370	390	190	6.3
Columbia River	Guaiacols/Pher	2,4,5-Trichlorophenol	WB	3	0	360	400	190	10
Columbia River	Guaiacols/Pher	2,4,6-Trichlorophenol	FS	3	0	370	390	190	6.3
Columbia River	Guaiacols/Pher	2,4,6-Trichlorophenol	WB	3	0	360	400	190	10
Columbia River	Guaiacols/Pher	2,3,4,6-Tetrachlorophenol	FS	3	0	370	390	190	6.3
Columbia River	Guaiacols/Pher	2,3,4,6-Tetrachlorophenol	WB	3	0	360	400	190	10
Columbia River	Guaiacols/Pher	Pentachlorophenol	FS	3	0	370	390	190	6.3
Columbia River	Guaiacols/Pher	Pentachlorophenol	WB	3	0	360	400	190	10
Columbia River	Guaiacols/Pher	Phenol	FS	3	0	370	390	190	6.3
Columbia River	Guaiacols/Pher	Phenol	WB	3	0	360	400	190	10
Columbia River	Metals	Aluminum	FS	3	2	1,000	2,200	1,300	840
Columbia River	Metals	Aluminum	WB	3	3	13,600	16,700	15,500	1,600
Columbia River	Metals	Antimony	FS	3	0	50	50	25	0.00
Columbia River	Metals	Antimony	WB	3	0	50	50	25	0.00
Columbia River	Metals	Arsenic	FS	3	3	120	140	130	10
Columbia River	Metals	Arsenic	WB	3	3	130	150	140	10
Columbia River	Metals	Barium	FS	3	3	260	380	330	62
Columbia River	Metals	Barium	WB	3	3	570	740	670	88

Appendix D-2: Tributary Summary Statistics
Mountain Whitefish

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Columbia River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Columbia River	Metals	Cadmium	FS	3	3	8.7	11	9.7	1.2
Columbia River	Metals	Cadmium	WB	3	3	48	54	51	3.1
Columbia River	Metals	Chromium	FS	3	3	210	450	320	120
Columbia River	Metals	Chromium	WB	3	3	130	180	150	25
Columbia River	Metals	Cobalt	FS	3	3	49	66	58	8.5
Columbia River	Metals	Cobalt	WB	3	3	93	120	110	15
Columbia River	Metals	Copper	FS	3	3	510	560	520	32
Columbia River	Metals	Copper	WB	3	3	620	710	660	46
Columbia River	Metals	Lead	FS	3	3	19	26	23	3.5
Columbia River	Metals	Lead	WB	3	3	42	72	59	16
Columbia River	Metals	Manganese	FS	3	3	680	750	720	32
Columbia River	Metals	Manganese	WB	3	3	2,900	3,200	3,100	170
Columbia River	Metals	Mercury	FS	3	0	100	100	50	0.00
Columbia River	Metals	Mercury	WB	3	0	100	100	50	0.00
Columbia River	Metals	Nickel	FS	3	3	40	120	95	48
Columbia River	Metals	Nickel	WB	3	3	78	82	80	2.0
Columbia River	Metals	Selenium	FS	3	3	440	500	470	30
Columbia River	Metals	Selenium	WB	3	3	1,000	1,100	1,100	60
Columbia River	Metals	Silver	FS	3	0	100	100	50	0.00
Columbia River	Metals	Silver	WB	3	0	100	100	50	0.00
Columbia River	Metals	Thallium	FS	3	0	50	50	25	0.00
Columbia River	Metals	Thallium	WB	3	0	50	50	25	0.00
Columbia River	Metals	Vanadium	FS	3	2	10	24	16	9.7
Columbia River	Metals	Vanadium	WB	3	3	61	89	76	14
Columbia River	Metals	Zinc	FS	3	3	13,000	15,000	14,000	950
Columbia River	Metals	Zinc	WB	3	3	23,700	25,400	24,700	890
Columbia River	PCBs	Aroclor 1016	FS	3	0	17	19	9.2	0.58
Columbia River	PCBs	Aroclor 1016	WB	3	0	16	19	8.8	0.76
Columbia River	PCBs	Aroclor 1221	FS	3	0	17	19	9.2	0.58
Columbia River	PCBs	Aroclor 1221	WB	3	0	16	19	8.8	0.76
Columbia River	PCBs	Aroclor 1232	FS	3	0	17	19	9.2	0.58
Columbia River	PCBs	Aroclor 1232	WB	3	0	16	19	8.8	0.76
Columbia River	PCBs	Aroclor 1242	FS	3	3	12	25	19	6.5
Columbia River	PCBs	Aroclor 1242	WB	3	3	22	25	24	1.5
Columbia River	PCBs	Aroclor 1248	FS	3	0	17	19	9.2	0.58
Columbia River	PCBs	Aroclor 1248	WB	3	0	16	19	8.8	0.76
Columbia River	PCBs	Aroclor 1254	FS	3	3	65	930	360	490
Columbia River	PCBs	Aroclor 1254	WB	3	3	110	140	130	17
Columbia River	PCBs	Aroclor 1260	FS	3	3	86	170	120	47
Columbia River	PCBs	Aroclor 1260	WB	3	3	55	86	71	16
Columbia River	PCBs	PCB 077	FS	3	3	0.32	0.88	0.52	0.31
Columbia River	PCBs	PCB 077	WB	3	3	0.28	0.31	0.29	0.015
Columbia River	PCBs	PCB 105	FS	3	3	8.5	45	21	21
Columbia River	PCBs	PCB 105	WB	3	3	4.6	7.3	5.8	1.4
Columbia River	PCBs	PCB 114	FS	3	3	0.79	3.1	1.6	1.3
Columbia River	PCBs	PCB 114	WB	3	3	0.45	0.71	0.58	0.13
Columbia River	PCBs	PCB 118	FS	3	3	15	110	49	57
Columbia River	PCBs	PCB 118	WB	3	3	8.7	12	11	1.7
Columbia River	PCBs	PCB 123	FS	3	3	0.29	1.5	0.72	0.68
Columbia River	PCBs	PCB 123	WB	3	3	0.20	0.25	0.22	0.027
Columbia River	PCBs	PCB 126	FS	3	3	0.032	0.096	0.056	0.034
Columbia River	PCBs	PCB 126	WB	3	3	0.010	0.016	0.013	0.0027
Columbia River	PCBs	PCB 156	FS	3	3	3.5	15	7.4	6.5
Columbia River	PCBs	PCB 156	WB	3	3	1.9	3.0	2.4	0.55
Columbia River	PCBs	PCB 157	FS	3	3	0.65	3.0	1.4	1.3
Columbia River	PCBs	PCB 157	WB	3	3	0.35	0.57	0.46	0.11
Columbia River	PCBs	PCB 167	FS	3	3	0.98	4.1	2.0	1.8
Columbia River	PCBs	PCB 167	WB	3	3	0.54	0.70	0.62	0.082
Columbia River	PCBs	PCB 169	FS	3	0	0.0064	0.016	0.0049	0.0026
Columbia River	PCBs	PCB 169	WB	3	0	0.0051	0.0052	0.0026	0.000043
Columbia River	PCBs	PCB 170	FS	3	3	4.3	9.8	6.2	3.1
Columbia River	PCBs	PCB 170	WB	3	3	2.6	3.6	3.2	0.51
Columbia River	PCBs	PCB 180	FS	3	3	11	20	14	4.7
Columbia River	PCBs	PCB 180	WB	3	3	6.1	9.7	7.6	1.9
Columbia River	PCBs	PCB 189	FS	3	3	0.16	0.41	0.24	0.14
Columbia River	PCBs	PCB 189	WB	3	3	0.093	0.13	0.11	0.019
Columbia River	Pesticides	Aldrin	FS	3	1	1.7	6.0	2.6	2.9
Columbia River	Pesticides	Aldrin	WB	3	3	1.6	1.8	1.7	0.10
Columbia River	Pesticides	Alpha-BHC	FS	3	0	1.7	1.9	0.92	0.058
Columbia River	Pesticides	Alpha-BHC	WB	3	3	1.3	1.8	1.5	0.27
Columbia River	Pesticides	Alpha-Chlordene	FS	3	0	1.7	1.9	0.92	0.058
Columbia River	Pesticides	Alpha-Chlordene	WB	3	0	1.6	1.9	0.88	0.076
Columbia River	Pesticides	Beta-BHC	FS	3	0	1.7	1.9	0.92	0.058
Columbia River	Pesticides	Beta-BHC	WB	3	0	1.6	1.9	0.88	0.076

Appendix D-2: Tributary Summary Statistics
Mountain Whitefish

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.7	1.9	0.92	0.058
Columbia River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.6	1.9	0.88	0.076
Columbia River	Pesticides	cis-Nonachlor	FS	3	3	6.3	17	10	5.8
Columbia River	Pesticides	cis-Nonachlor	WB	3	3	11	17	14	3.0
Columbia River	Pesticides	DDD-o,p'	FS	3	3	9.9	12	11	1.2
Columbia River	Pesticides	DDD-o,p'	WB	3	3	17	18	17	0.58
Columbia River	Pesticides	DDE-o,p'	FS	3	3	11	56	27	25
Columbia River	Pesticides	DDE-o,p'	WB	3	3	14	19	16	2.5
Columbia River	Pesticides	DDT-o,p'	FS	3	0	1.7	1.9	0.92	0.058
Columbia River	Pesticides	DDT-o,p'	WB	3	0	1.6	1.9	0.88	0.076
Columbia River	Pesticides	DDD-p,p'	FS	3	3	76	96	83	11
Columbia River	Pesticides	DDD-p,p'	WB	3	3	93	110	99	9.5
Columbia River	Pesticides	DDE-p,p'	FS	3	3	600	710	650	55
Columbia River	Pesticides	DDE-p,p'	WB	3	3	520	740	640	110
Columbia River	Pesticides	DDT-p,p'	FS	3	3	4.0	13	9.3	4.7
Columbia River	Pesticides	DDT-p,p'	WB	3	3	2.9	6.4	4.2	1.9
Columbia River	Pesticides	DDMU	FS	3	3	23	40	30	8.7
Columbia River	Pesticides	DDMU	WB	3	3	25	31	29	3.5
Columbia River	Pesticides	Delta-BHC	FS	3	0	1.7	1.9	0.92	0.058
Columbia River	Pesticides	Delta-BHC	WB	3	0	1.6	1.9	0.88	0.076
Columbia River	Pesticides	Endosulfan Sulfate	FS	3	0	1.7	1.9	0.92	0.058
Columbia River	Pesticides	Endosulfan Sulfate	WB	3	0	1.6	1.9	0.88	0.076
Columbia River	Pesticides	Gamma-Chlordane	FS	3	0	1.7	1.9	0.92	0.058
Columbia River	Pesticides	Gamma-Chlordane	WB	3	0	1.6	1.9	0.88	0.076
Columbia River	Pesticides	gamma-Chlordane	FS	3	0	1.7	1.9	0.92	0.058
Columbia River	Pesticides	gamma-Chlordane	WB	3	0	1.6	1.9	0.88	0.076
Columbia River	Pesticides	Heptachlor	FS	3	0	1.7	1.9	0.92	0.058
Columbia River	Pesticides	Heptachlor	WB	3	0	1.6	1.9	0.88	0.076
Columbia River	Pesticides	Heptachlor Epoxide	FS	3	0	1.7	1.9	0.92	0.058
Columbia River	Pesticides	Heptachlor Epoxide	WB	3	0	1.6	1.9	0.88	0.076
Columbia River	Pesticides	Hexachlorobenzene	FS	3	0	1.7	1.9	0.92	0.058
Columbia River	Pesticides	Hexachlorobenzene	WB	3	3	1.5	2.7	2.1	0.60
Columbia River	Pesticides	Lindane	FS	3	0	1.7	1.9	0.92	0.058
Columbia River	Pesticides	Lindane	WB	3	0	1.6	1.9	0.88	0.076
Columbia River	Pesticides	Mirex	FS	3	3	5.8	13	8.8	3.8
Columbia River	Pesticides	Mirex	WB	3	3	3.9	6.0	5.1	1.1
Columbia River	Pesticides	Oxychlordane	FS	3	0	1.7	1.9	0.92	0.058
Columbia River	Pesticides	Oxychlordane	WB	3	0	1.6	1.9	0.88	0.076
Columbia River	Pesticides	Pentachloroanisol	FS	3	0	1.7	1.9	0.92	0.058
Columbia River	Pesticides	Pentachloroanisol	WB	3	1	1.6	1.9	1.1	0.43
Columbia River	Pesticides	Toxaphene	FS	3	0	52	58	28	1.6
Columbia River	Pesticides	Toxaphene	WB	3	0	48	57	27	2.4
Columbia River	Pesticides	trans-Nonachlor	FS	3	2	1.7	3.7	2.1	1.5
Columbia River	Pesticides	trans-Nonachlor	WB	3	3	2.7	4.4	3.7	0.91
Columbia River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	18	20	9.6	0.32
Columbia River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	18	20	9.4	0.50
Columbia River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	37	39	19	0.64
Columbia River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	36	40	19	1.0
Columbia River	Semivolatiles	2-Chloronaphthalene	FS	3	0	18	20	9.6	0.32
Columbia River	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	20	9.4	0.50
Columbia River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	Acenaphthene	FS	3	0	18	20	9.6	0.32
Columbia River	Semivolatiles	Acenaphthene	WB	3	0	19	21	10.0	0.60
Columbia River	Semivolatiles	Acenaphthylene	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	Acenaphthylene	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	Anthracene	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	Anthracene	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	18	20	9.6	0.32
Columbia River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	20	9.4	0.50

Appendix D-2: Tributary Summary Statistics
Mountain Whitefish

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	18	20	9.6	0.32
Columbia River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	20	9.4	0.50
Columbia River	Semivolatiles	Chrysene	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	Chrysene	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	18	20	9.6	0.32
Columbia River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	20	9.4	0.50
Columbia River	Semivolatiles	Dibenzofuran	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	Dibenzofuran	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	Fluoranthene	FS	3	0	18	20	9.6	0.32
Columbia River	Semivolatiles	Fluoranthene	WB	3	0	18	20	9.4	0.50
Columbia River	Semivolatiles	9H-Fluorene	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	9H-Fluorene	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	Hexachloroethane	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	Hexachloroethane	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	18	20	9.6	0.32
Columbia River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	20	9.4	0.50
Columbia River	Semivolatiles	Naphthalene	FS	3	0	25	26	13	0.34
Columbia River	Semivolatiles	Naphthalene	WB	3	0	22	27	13	1.2
Columbia River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	Nitrobenzene	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	Nitrobenzene	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	Phenanthrene	FS	3	0	9.2	9.8	4.8	0.16
Columbia River	Semivolatiles	Phenanthrene	WB	3	0	8.9	9.9	4.7	0.25
Columbia River	Semivolatiles	Pyrene	FS	3	0	18	20	9.6	0.32
Columbia River	Semivolatiles	Pyrene	WB	3	0	18	20	9.4	0.50
Columbia River	Semivolatiles	Retene	FS	3	0	18	20	9.6	0.32
Columbia River	Semivolatiles	Retene	WB	3	0	18	20	9.4	0.50
Deschutes River	Dioxin/furans	2,3,7,8-TCDD	FS	3	3	0.000050	0.000070	0.000060	0.000010
Deschutes River	Dioxin/furans	2,3,7,8-TCDD	WB	3	2	0.000050	0.000080	0.000058	0.000029
Deschutes River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	3	0.00016	0.00020	0.00018	0.000020
Deschutes River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	2	0.000030	0.00024	0.00015	0.00012
Deschutes River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	2	0.000010	0.00013	0.000088	0.000072
Deschutes River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	3	0.00012	0.00015	0.00013	0.000015
Deschutes River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.00015	0.00020	0.00017	0.000026
Deschutes River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	3	0.00022	0.00027	0.00024	0.000029
Deschutes River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	3	0.000060	0.00011	0.000087	0.000025
Deschutes River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000070	0.000090	0.000068	0.000029
Deschutes River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.00023	0.00028	0.00026	0.000028
Deschutes River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00035	0.00041	0.00039	0.000035
Deschutes River	Dioxin/furans	OCDD	FS	3	3	0.00024	0.00052	0.00040	0.00014
Deschutes River	Dioxin/furans	OCDD	WB	3	3	0.00042	0.00057	0.00049	0.000075
Deschutes River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00051	0.00069	0.00062	0.000095
Deschutes River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00095	0.0012	0.0011	0.00015
Deschutes River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.000060	0.00010	0.000080	0.000020
Deschutes River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	2	0.000040	0.000080	0.000057	0.000032
Deschutes River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.000060	0.00011	0.000083	0.000025
Deschutes River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.000090	0.00010	0.000097	0.0000058
Deschutes River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	3	0.000030	0.000050	0.000040	0.000010
Deschutes River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	1	0.000040	0.000090	0.000038	0.0000076
Deschutes River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000040	0.000060	0.000050	0.000010
Deschutes River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	1	0.000040	0.000090	0.000038	0.0000076
Deschutes River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	3	0.000080	0.00015	0.00011	0.000033
Deschutes River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	3	0.000070	0.00015	0.00011	0.000040
Deschutes River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	3	0.00014	0.00016	0.00015	0.000010
Deschutes River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00013	0.00017	0.00016	0.000023
Deschutes River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	3	0.000070	0.00011	0.000090	0.000020
Deschutes River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000060	0.00010	0.000077	0.000040
Deschutes River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	3	0.000020	0.000060	0.000040	0.000020
Deschutes River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	1	0.000020	0.000080	0.000030	0.000010
Deschutes River	Dioxin/furans	OCDF	FS	3	3	0.000030	0.00010	0.000067	0.000035
Deschutes River	Dioxin/furans	OCDF	WB	3	1	0.000040	0.000090	0.000040	0.0000050
Deschutes River	Guaiacols/Pher	4-Chloroguaiacol	FS	3	0	430	490	230	14
Deschutes River	Guaiacols/Pher	4-Chloroguaiacol	WB	3	0	420	480	230	15
Deschutes River	Guaiacols/Pher	3,4-Dichloroguaiacol	FS	3	0	430	490	230	14
Deschutes River	Guaiacols/Pher	3,4-Dichloroguaiacol	WB	3	0	420	480	230	15
Deschutes River	Guaiacols/Pher	4,5-Dichloroguaiacol	FS	3	0	430	490	230	14
Deschutes River	Guaiacols/Pher	4,5-Dichloroguaiacol	WB	3	0	420	480	230	15

Appendix D-2: Tributary Summary Statistics
Mountain Whitefish

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Deschutes River	Guaiacols/Pher	4,6-Dichloroguaiacol	FS	3	0	430	490	230	14
Deschutes River	Guaiacols/Pher	4,6-Dichloroguaiacol	WB	3	0	420	480	230	15
Deschutes River	Guaiacols/Pher	3,4,5-Trichloroguaiacol	FS	3	0	430	490	230	14
Deschutes River	Guaiacols/Pher	3,4,5-Trichloroguaiacol	WB	3	0	420	480	230	15
Deschutes River	Guaiacols/Pher	3,4,6-Trichloroguaiacol	FS	3	0	170	200	92	5.8
Deschutes River	Guaiacols/Pher	3,4,6-Trichloroguaiacol	WB	3	0	170	190	91	6.0
Deschutes River	Guaiacols/Pher	4,5,6-Trichloroguaiacol	FS	3	0	430	490	230	14
Deschutes River	Guaiacols/Pher	4,5,6-Trichloroguaiacol	WB	3	0	420	480	230	15
Deschutes River	Guaiacols/Pher	Tetrachloroguaiacol	FS	3	0	170	200	92	5.8
Deschutes River	Guaiacols/Pher	Tetrachloroguaiacol	WB	3	0	170	190	91	6.0
Deschutes River	Guaiacols/Pher	2-Chlorophenol	FS	3	0	170	200	92	5.8
Deschutes River	Guaiacols/Pher	2-Chlorophenol	WB	3	0	170	190	91	6.0
Deschutes River	Guaiacols/Pher	4-Chloro-3-methylphenol	FS	3	0	170	200	92	5.8
Deschutes River	Guaiacols/Pher	4-Chloro-3-methylphenol	WB	3	0	170	190	91	6.0
Deschutes River	Guaiacols/Pher	2,4-Dichlorophenol	FS	3	0	170	200	92	5.8
Deschutes River	Guaiacols/Pher	2,4-Dichlorophenol	WB	3	0	170	190	91	6.0
Deschutes River	Guaiacols/Pher	2,4-Dimethylphenol	FS	3	0	430	490	230	14
Deschutes River	Guaiacols/Pher	2,4-Dimethylphenol	WB	3	0	420	480	230	15
Deschutes River	Guaiacols/Pher	2,4,5-Trichlorophenol	FS	1	0	190	190	93	na
Deschutes River	Guaiacols/Pher	2,4,5-Trichlorophenol	WB	0	0	0.00	0.00	0.00	0.00
Deschutes River	Guaiacols/Pher	2,4,6-Trichlorophenol	FS	3	0	170	200	92	5.8
Deschutes River	Guaiacols/Pher	2,4,6-Trichlorophenol	WB	3	0	170	190	91	6.0
Deschutes River	Guaiacols/Pher	2,3,4,6-Tetrachlorophenol	FS	1	0	190	190	93	na
Deschutes River	Guaiacols/Pher	2,3,4,6-Tetrachlorophenol	WB	0	0	0.00	0.00	0.00	0.00
Deschutes River	Guaiacols/Pher	Pentachlorophenol	FS	3	0	170	200	92	5.8
Deschutes River	Guaiacols/Pher	Pentachlorophenol	WB	3	0	170	190	91	6.0
Deschutes River	Guaiacols/Pher	Phenol	FS	3	0	170	200	92	5.8
Deschutes River	Guaiacols/Pher	Phenol	WB	3	0	170	190	91	6.0
Deschutes River	Metals	Aluminum	FS	3	0	5,000	20,000	6,300	3,800
Deschutes River	Metals	Aluminum	WB	3	2	9,100	22,000	14,000	6,900
Deschutes River	Metals	Antimony	FS	3	0	50	50	25	0.00
Deschutes River	Metals	Antimony	WB	3	0	50	50	25	0.00
Deschutes River	Metals	Arsenic	FS	3	3	51	73	64	11
Deschutes River	Metals	Arsenic	WB	3	3	130	140	140	5.8
Deschutes River	Metals	Barium	FS	3	2	200	320	220	110
Deschutes River	Metals	Barium	WB	3	3	500	940	740	220
Deschutes River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Deschutes River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Deschutes River	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
Deschutes River	Metals	Cadmium	WB	3	3	4.2	6.3	5.5	1.1
Deschutes River	Metals	Chromium	FS	3	0	100	100	50	0.00
Deschutes River	Metals	Chromium	WB	3	2	100	110	87	32
Deschutes River	Metals	Cobalt	FS	3	3	30	40	34	5.3
Deschutes River	Metals	Cobalt	WB	3	3	84	110	95	13
Deschutes River	Metals	Copper	FS	3	3	560	580	570	13
Deschutes River	Metals	Copper	WB	3	3	1,100	5,000	2,500	2,200
Deschutes River	Metals	Lead	FS	3	3	12	19	14	3.8
Deschutes River	Metals	Lead	WB	3	3	18	44	27	15
Deschutes River	Metals	Manganese	FS	3	3	670	900	760	130
Deschutes River	Metals	Manganese	WB	3	3	4,200	4,600	4,300	230
Deschutes River	Metals	Mercury	FS	3	3	71	98	80	15
Deschutes River	Metals	Mercury	WB	3	3	49	120	74	38
Deschutes River	Metals	Nickel	FS	3	3	41	81	56	22
Deschutes River	Metals	Nickel	WB	3	3	230	1,300	620	630
Deschutes River	Metals	Selenium	FS	3	3	300	360	340	30
Deschutes River	Metals	Selenium	WB	3	3	590	670	630	44
Deschutes River	Metals	Silver	FS	3	0	100	100	50	0.00
Deschutes River	Metals	Silver	WB	3	0	100	100	50	0.00
Deschutes River	Metals	Thallium	FS	3	0	50	50	25	0.00
Deschutes River	Metals	Thallium	WB	3	0	50	50	25	0.00
Deschutes River	Metals	Vanadium	FS	3	3	36	50	45	7.8
Deschutes River	Metals	Vanadium	WB	3	3	240	290	250	27
Deschutes River	Metals	Zinc	FS	3	3	17,000	20,000	18,000	1,700
Deschutes River	Metals	Zinc	WB	3	3	32,000	40,000	35,000	4,200
Deschutes River	PCBs	Aroclor 1016	FS	3	0	17	19	8.8	0.58
Deschutes River	PCBs	Aroclor 1016	WB	3	0	18	20	9.5	0.50
Deschutes River	PCBs	Aroclor 1221	FS	3	0	17	19	8.8	0.58
Deschutes River	PCBs	Aroclor 1221	WB	3	0	18	20	9.5	0.50
Deschutes River	PCBs	Aroclor 1232	FS	3	0	17	19	8.8	0.58
Deschutes River	PCBs	Aroclor 1232	WB	3	0	18	20	9.5	0.50
Deschutes River	PCBs	Aroclor 1242	FS	3	0	17	19	8.8	0.58
Deschutes River	PCBs	Aroclor 1242	WB	3	0	18	20	9.5	0.50
Deschutes River	PCBs	Aroclor 1248	FS	3	0	17	19	8.8	0.58
Deschutes River	PCBs	Aroclor 1248	WB	3	0	18	20	9.5	0.50
Deschutes River	PCBs	Aroclor 1254	FS	3	3	25	30	27	2.9
Deschutes River	PCBs	Aroclor 1254	WB	3	3	36	46	42	5.5

Appendix D-2: Tributary Summary Statistics
Mountain Whitefish

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Deschutes River	PCBs	Aroclor 1260	FS	3	0	17	19	8.8	0.58
Deschutes River	PCBs	Aroclor 1260	WB	3	0	18	20	9.5	0.50
Deschutes River	PCBs	PCB 077	FS	3	3	0.014	0.027	0.019	0.0069
Deschutes River	PCBs	PCB 077	WB	3	3	0.033	0.044	0.038	0.0057
Deschutes River	PCBs	PCB 105	FS	3	3	0.98	1.1	1.0	0.056
Deschutes River	PCBs	PCB 105	WB	3	3	1.3	1.6	1.4	0.15
Deschutes River	PCBs	PCB 114	FS	3	3	0.077	0.084	0.080	0.0040
Deschutes River	PCBs	PCB 114	WB	3	3	0.095	0.12	0.10	0.011
Deschutes River	PCBs	PCB 118	FS	3	3	2.1	2.4	2.3	0.17
Deschutes River	PCBs	PCB 118	WB	3	3	0.027	3.3	2.0	1.7
Deschutes River	PCBs	PCB 123	FS	3	3	0.021	0.028	0.026	0.0039
Deschutes River	PCBs	PCB 123	WB	3	3	0.032	0.039	0.034	0.0041
Deschutes River	PCBs	PCB 126	FS	3	3	0.0051	0.0064	0.0060	0.00074
Deschutes River	PCBs	PCB 126	WB	3	3	0.0072	0.0099	0.0082	0.0014
Deschutes River	PCBs	PCB 156	FS	3	3	0.33	0.39	0.37	0.033
Deschutes River	PCBs	PCB 156	WB	3	3	0.39	0.47	0.41	0.046
Deschutes River	PCBs	PCB 157	FS	3	3	0.060	0.072	0.067	0.0066
Deschutes River	PCBs	PCB 157	WB	3	3	0.074	0.085	0.078	0.0063
Deschutes River	PCBs	PCB 167	FS	3	3	0.12	0.13	0.13	0.0073
Deschutes River	PCBs	PCB 167	WB	3	3	0.14	0.17	0.15	0.015
Deschutes River	PCBs	PCB 169	FS	3	0	0.0012	0.0021	0.00077	0.00023
Deschutes River	PCBs	PCB 169	WB	3	0	0.0014	0.0019	0.00077	0.00014
Deschutes River	PCBs	PCB 170	FS	3	3	0.26	0.34	0.31	0.045
Deschutes River	PCBs	PCB 170	WB	3	3	0.27	0.41	0.33	0.072
Deschutes River	PCBs	PCB 180	FS	3	3	0.67	0.89	0.80	0.12
Deschutes River	PCBs	PCB 180	WB	3	3	0.70	1.1	0.86	0.20
Deschutes River	PCBs	PCB 189	FS	3	3	0.013	0.015	0.014	0.0014
Deschutes River	PCBs	PCB 189	WB	3	3	0.014	0.018	0.016	0.0023
Deschutes River	Pesticides	Aldrin	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	Aldrin	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	Alpha-BHC	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	Alpha-BHC	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	Alpha-Chlordene	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	Alpha-Chlordene	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	Beta-BHC	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	Beta-BHC	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	cis-Nonachlor	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	cis-Nonachlor	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	DDD-o,p'	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	DDD-o,p'	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	DDE-o,p'	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	DDE-o,p'	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	DDT-o,p'	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	DDT-o,p'	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	DDD-p,p'	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	DDD-p,p'	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	DDE-p,p'	FS	3	3	8.0	10	8.7	1.1
Deschutes River	Pesticides	DDE-p,p'	WB	3	3	13	17	15	2.1
Deschutes River	Pesticides	DDT-p,p'	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	DDT-p,p'	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	DDMU	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	DDMU	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	Delta-BHC	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	Delta-BHC	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	Endosulfan Sulfate	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	Endosulfan Sulfate	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	Gamma-Chlordane	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	Gamma-Chlordane	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	gamma-Chlordene	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	gamma-Chlordene	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	Heptachlor	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	Heptachlor	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	Heptachlor Epoxide	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	Heptachlor Epoxide	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	Hexachlorobenzene	FS	3	0	1.7	1.9	0.92	0.058
Deschutes River	Pesticides	Hexachlorobenzene	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	Lindane	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	Lindane	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	Mirex	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	Mirex	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	Oxychlordane	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	Oxychlordane	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Pesticides	Pentachloroanisol	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	Pentachloroanisol	WB	3	0	1.8	2.0	0.95	0.050

Appendix D-2: Tributary Summary Statistics
Mountain Whitefish

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Deschutes River	Pesticides	Toxaphene	FS	3	0	50	56	26	1.6
Deschutes River	Pesticides	Toxaphene	WB	3	0	55	60	29	1.3
Deschutes River	Pesticides	trans-Nonachlor	FS	3	0	1.7	1.9	0.88	0.058
Deschutes River	Pesticides	trans-Nonachlor	WB	3	0	1.8	2.0	0.95	0.050
Deschutes River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	4.2	4.8	2.3	0.15
Deschutes River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	4.2	4.8	2.3	0.15
Deschutes River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	43	49	23	1.5
Deschutes River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	8.4	9.6	4.5	0.31
Deschutes River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	87	98	46	2.9
Deschutes River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	17	19	9.1	0.60
Deschutes River	Semivolatiles	2-Chloronaphthalene	FS	3	0	22	46	15	6.7
Deschutes River	Semivolatiles	2-Chloronaphthalene	WB	3	0	4.2	4.8	2.3	0.15
Deschutes River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	4.2	4.8	2.3	0.15
Deschutes River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	4.2	4.8	2.3	0.15
Deschutes River	Semivolatiles	Acenaphthene	FS	3	0	43	49	23	1.5
Deschutes River	Semivolatiles	Acenaphthene	WB	3	0	8.4	9.6	4.5	0.31
Deschutes River	Semivolatiles	Acenaphthylene	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	Acenaphthylene	WB	3	0	4.2	4.8	2.3	0.15
Deschutes River	Semivolatiles	Anthracene	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	Anthracene	WB	3	0	4.2	4.8	2.3	0.15
Deschutes River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	4.3	4.8	2.3	0.13
Deschutes River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	4.2	4.8	2.3	0.15
Deschutes River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	4.2	4.8	2.3	0.15
Deschutes River	Semivolatiles	Benzo(a)anthracene	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	Benzo(a)anthracene	WB	3	0	4.2	4.8	2.3	0.15
Deschutes River	Semivolatiles	Benzo(a)pyrene	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	Benzo(a)pyrene	WB	3	0	84	96	45	3.0
Deschutes River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	43	49	23	1.5
Deschutes River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	170	190	91	6.0
Deschutes River	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	23	49	19	6.8
Deschutes River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	170	190	91	6.0
Deschutes River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	23	49	19	6.8
Deschutes River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	170	190	91	6.0
Deschutes River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	43	49	23	1.5
Deschutes River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	8.4	9.6	4.5	0.31
Deschutes River	Semivolatiles	Chrysene	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	Chrysene	WB	3	0	4.2	4.8	2.3	0.15
Deschutes River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	43	49	23	1.5
Deschutes River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	170	190	91	6.0
Deschutes River	Semivolatiles	Dibenzofuran	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	Dibenzofuran	WB	3	0	4.2	4.8	2.3	0.15
Deschutes River	Semivolatiles	Fluoranthene	FS	3	0	43	49	23	1.5
Deschutes River	Semivolatiles	Fluoranthene	WB	3	0	8.4	9.6	4.5	0.31
Deschutes River	Semivolatiles	9H-Fluorene	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	9H-Fluorene	WB	3	0	4.2	4.8	2.3	0.15
Deschutes River	Semivolatiles	Hexachlorobutadiene	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	Hexachlorobutadiene	WB	3	0	4.2	4.8	2.3	0.15
Deschutes River	Semivolatiles	Hexachloroethane	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	Hexachloroethane	WB	3	0	4.2	4.8	2.3	0.15
Deschutes River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	43	49	23	1.5
Deschutes River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	170	190	91	6.0
Deschutes River	Semivolatiles	Naphthalene	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	Naphthalene	WB	3	0	25	30	14	1.2
Deschutes River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	4.2	4.8	2.3	0.15
Deschutes River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	3	7.3	8.9	7.8	0.92
Deschutes River	Semivolatiles	Nitrobenzene	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	Nitrobenzene	WB	3	0	4.2	4.8	2.3	0.15
Deschutes River	Semivolatiles	Phenanthrene	FS	3	0	22	25	12	0.74
Deschutes River	Semivolatiles	Phenanthrene	WB	3	0	4.4	5.9	2.5	0.38
Deschutes River	Semivolatiles	Pyrene	FS	3	0	43	49	23	1.5
Deschutes River	Semivolatiles	Pyrene	WB	3	0	8.4	9.6	4.5	0.31
Deschutes River	Semivolatiles	Retene	FS	3	0	43	49	23	1.5
Deschutes River	Semivolatiles	Retene	WB	3	1	8.4	20	9.7	9.0
Umatilla River	Dioxin/furans	2,3,7,8-TCDD	FS	3	2	0.000010	0.000070	0.000042	0.000033
Umatilla River	Dioxin/furans	2,3,7,8-TCDD	Tissue Type	3	2	0.00023	0.00033	0.00029	0.000055
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	3	0.00015	0.00016	0.00015	0.0000058
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDD	Tissue Type	3	3	0.000060	0.000060	0.000060	0.00

Appendix D-2: Tributary Summary Statistics
Mountain Whitefish

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	3	0.00010	0.00010	0.00010	0.00
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDD	Tissue Type	3	3	0.000030	0.000030	0.000030	0.00
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.00010	0.00013	0.00011	0.000017
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDD	Tissue Type	3	3	0.000030	0.000040	0.000037	0.0000058
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	3	0.000030	0.000050	0.000037	0.000012
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDD	Tissue Type	3	3	0.000010	0.000060	0.000023	0.000032
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.00019	0.00029	0.00023	0.000055
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	Tissue Type	3	3	0.000080	0.000090	0.000087	0.0000058
Umatilla River	Dioxin/furans	OCDD	FS	3	3	0.00021	0.00028	0.00024	0.000036
Umatilla River	Dioxin/furans	OCDD	Tissue Type	3	3	0.000010	0.000040	0.000022	0.000018
Umatilla River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00014	0.00019	0.00016	0.000029
Umatilla River	Dioxin/furans	2,3,7,8-TCDF	Tissue Type	3	3	190	260	110	20
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.000040	0.000050	0.000047	0.0000058
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDF	Tissue Type	3	3	4.7	6.5	2.7	0.49
Umatilla River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	2	0.000010	0.000060	0.000035	0.000028
Umatilla River	Dioxin/furans	2,3,4,7,8-PeCDF	Tissue Type	3	3	0.000010	0.00010	0.000065	0.000052
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	1	0.000010	0.000020	0.000010	0.0000087
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDF	Tissue Type	3	3	0.00014	0.00018	0.00017	0.000023
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	3	0.000030	0.000040	0.000033	0.0000058
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDF	Tissue Type	3	3	0.000050	0.000060	0.000053	0.0000058
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	3	0.000060	0.000060	0.000060	0.00
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDF	Tissue Type	3	1	0.00018	0.00021	0.00020	0.000015
Umatilla River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	3	0.00013	0.00014	0.00013	0.0000058
Umatilla River	Dioxin/furans	2,3,4,6,7,8-HxCDF	Tissue Type	3	3	0.000070	0.000090	0.000077	0.000012
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000010	0.000090	0.000055	0.000044
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	Tissue Type	3	3	0.000010	0.000020	0.000010	0.0000087
Umatilla River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Umatilla River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	Tissue Type	3	1	0.00011	0.00012	0.00011	0.0000058
Umatilla River	Dioxin/furans	OCDF	FS	3	2	0.000010	0.000020	0.000015	0.0000087
Umatilla River	Dioxin/furans	OCDF	Tissue Type	3	2	2.6	3.0	1.4	0.10
Umatilla River	Guaiacols/Pher	4-Chloroguaiacol	FS	3	0	1,200	1,300	640	42
Umatilla River	Guaiacols/Pher	4-Chloroguaiacol	Tissue Type	3	0	4.7	6.5	2.7	0.49
Umatilla River	Guaiacols/Pher	3,4-Dichloroguaiacol	FS	3	0	1,200	1,300	640	42
Umatilla River	Guaiacols/Pher	3,4-Dichloroguaiacol	Tissue Type	3	0	470	650	270	50
Umatilla River	Guaiacols/Pher	4,5-Dichloroguaiacol	FS	3	0	1,200	1,300	640	42
Umatilla River	Guaiacols/Pher	4,5-Dichloroguaiacol	Tissue Type	3	0	470	650	270	50
Umatilla River	Guaiacols/Pher	4,6-Dichloroguaiacol	FS	3	0	1,200	1,300	640	42
Umatilla River	Guaiacols/Pher	4,6-Dichloroguaiacol	Tissue Type	3	0	4.7	6.5	2.7	0.49
Umatilla River	Guaiacols/Pher	3,4,5-Trichloroguaiacol	FS	3	0	1,200	1,300	640	42
Umatilla River	Guaiacols/Pher	3,4,5-Trichloroguaiacol	Tissue Type	3	0	190	260	110	20
Umatilla River	Guaiacols/Pher	3,4,6-Trichloroguaiacol	FS	3	0	470	530	260	17
Umatilla River	Guaiacols/Pher	3,4,6-Trichloroguaiacol	Tissue Type	3	0	470	650	270	50
Umatilla River	Guaiacols/Pher	4,5,6-Trichloroguaiacol	FS	3	0	1,200	1,300	640	42
Umatilla River	Guaiacols/Pher	4,5,6-Trichloroguaiacol	Tissue Type	3	0	470	650	270	50
Umatilla River	Guaiacols/Pher	Tetrachloroguaiacol	FS	3	0	470	530	260	17
Umatilla River	Guaiacols/Pher	Tetrachloroguaiacol	Tissue Type	3	0	50	50	25	20.02
Umatilla River	Guaiacols/Pher	2-Chlorophenol	FS	3	0	470	530	260	17
Umatilla River	Guaiacols/Pher	2-Chlorophenol	Tissue Type	3	0	470	650	270	50
Umatilla River	Guaiacols/Pher	4-Chloro-3-methylphenol	FS	3	0	470	530	260	17
Umatilla River	Guaiacols/Pher	4-Chloro-3-methylphenol	Tissue Type	3	0	470	650	270	50
Umatilla River	Guaiacols/Pher	2,4-Dichlorophenol	FS	3	0	470	530	260	17
Umatilla River	Guaiacols/Pher	2,4-Dichlorophenol	Tissue Type	3	0	470	650	270	50
Umatilla River	Guaiacols/Pher	2,4-Dimethylphenol	FS	3	0	1,200	1,300	640	42
Umatilla River	Guaiacols/Pher	2,4-Dimethylphenol	Tissue Type	3	0	9.4	13	5.4	0.99
Umatilla River	Guaiacols/Pher	2,4,6-Trichlorophenol	FS	3	0	470	530	260	17
Umatilla River	Guaiacols/Pher	2,4,6-Trichlorophenol	Tissue Type	3	0	190	260	110	20
Umatilla River	Guaiacols/Pher	Pentachlorophenol	FS	3	0	470	530	260	17
Umatilla River	Guaiacols/Pher	Pentachlorophenol	Tissue Type	3	0	4.7	6.5	2.7	0.49
Umatilla River	Guaiacols/Pher	Phenol	FS	3	0	470	530	260	17
Umatilla River	Guaiacols/Pher	Phenol	Tissue Type	3	0	9.4	13	5.4	0.99
Umatilla River	Metals	Aluminum	FS	3	3	1,300	3,100	2,000	910
Umatilla River	Metals	Aluminum	Tissue Type	3	3	4.7	6.5	2.7	0.49
Umatilla River	Metals	Antimony	FS	3	0	50	50	25	0.00
Umatilla River	Metals	Antimony	Tissue Type	3	0	140	180	160	21
Umatilla River	Metals	Arsenic	FS	3	3	93	110	100	8.5
Umatilla River	Metals	Arsenic	Tissue Type	3	3	690	930	770	140
Umatilla River	Metals	Barium	FS	3	3	230	310	270	40
Umatilla River	Metals	Barium	Tissue Type	3	3	4.7	6.5	2.7	0.49
Umatilla River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Umatilla River	Metals	Beryllium	Tissue Type	3	0	2.6	3.0	1.4	0.10
Umatilla River	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
Umatilla River	Metals	Cadmium	Tissue Type	3	2	110	120	110	5.8
Umatilla River	Metals	Chromium	FS	3	2	100	120	93	38
Umatilla River	Metals	Chromium	Tissue Type	3	3	4.7	6.5	2.7	0.49
Umatilla River	Metals	Cobalt	FS	3	3	22	31	26	4.7
Umatilla River	Metals	Cobalt	Tissue Type	3	3	960	1,100	990	53

Appendix D-2: Tributary Summary Statistics
Mountain Whitefish

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Metals	Copper	FS	3	3	720	840	760	65
Umatilla River	Metals	Copper	Tissue Type	3	3	2.6	3.0	1.4	0.10
Umatilla River	Metals	Lead	FS	3	0	10	10	5.0	0.00
Umatilla River	Metals	Lead	Tissue Type	3	3	2.6	3.0	1.4	0.10
Umatilla River	Metals	Manganese	FS	3	3	580	790	650	120
Umatilla River	Metals	Manganese	Tissue Type	3	3	47	55	52	4.2
Umatilla River	Metals	Mercury	FS	3	3	49	75	60	13
Umatilla River	Metals	Mercury	Tissue Type	3	3	2.6	3.0	1.4	0.10
Umatilla River	Metals	Nickel	FS	3	3	120	150	130	18
Umatilla River	Metals	Nickel	Tissue Type	3	3	4.7	6.5	2.7	0.49
Umatilla River	Metals	Selenium	FS	3	3	500	550	520	27
Umatilla River	Metals	Selenium	Tissue Type	3	3	100	100	50	343.93
Umatilla River	Metals	Silver	FS	3	0	100	100	50	0.00
Umatilla River	Metals	Silver	Tissue Type	3	0	190	260	110	20
Umatilla River	Metals	Thallium	FS	3	0	50	50	25	0.00
Umatilla River	Metals	Thallium	Tissue Type	3	0	78	89	42	2.8
Umatilla River	Metals	Vanadium	FS	3	3	24	37	30	6.6
Umatilla River	Metals	Vanadium	Tissue Type	3	3	23,000	26,000	24,000	1,400
Umatilla River	Metals	Zinc	FS	3	3	15,000	16,000	15,000	530
Umatilla River	Metals	Zinc	Tissue Type	3	3	21	24	11	0.76
Umatilla River	PCBs	Aroclor 1016	FS	3	0	16	19	8.8	0.76
Umatilla River	PCBs	Aroclor 1016	Tissue Type	3	0	21	24	11	0.76
Umatilla River	PCBs	Aroclor 1221	FS	3	0	16	19	8.8	0.76
Umatilla River	PCBs	Aroclor 1221	Tissue Type	3	0	21	24	11	0.76
Umatilla River	PCBs	Aroclor 1232	FS	3	0	16	19	8.8	0.76
Umatilla River	PCBs	Aroclor 1232	Tissue Type	3	0	21	24	11	0.76
Umatilla River	PCBs	Aroclor 1242	FS	3	0	16	19	8.8	0.76
Umatilla River	PCBs	Aroclor 1242	Tissue Type	3	0	21	24	11	0.76
Umatilla River	PCBs	Aroclor 1248	FS	3	0	16	19	8.8	0.76
Umatilla River	PCBs	Aroclor 1248	Tissue Type	3	0	21	24	11	0.76
Umatilla River	PCBs	Aroclor 1254	FS	3	0	16	19	8.8	0.76
Umatilla River	PCBs	Aroclor 1254	Tissue Type	3	0	26	30	27	2.3
Umatilla River	PCBs	Aroclor 1260	FS	3	2	8.5	22	13	7.5
Umatilla River	PCBs	Aroclor 1260	Tissue Type	3	3	0.022	0.12	0.062	0.053
Umatilla River	PCBs	PCB 077	FS	3	3	0.017	0.056	0.031	0.022
Umatilla River	PCBs	PCB 077	Tissue Type	3	3	2.6	3.0	1.4	0.10
Umatilla River	PCBs	PCB 105	FS	3	3	0.15	0.56	0.29	0.23
Umatilla River	PCBs	PCB 105	Tissue Type	3	3	0.022	0.11	0.057	0.044
Umatilla River	PCBs	PCB 114	FS	3	3	0.013	0.045	0.024	0.018
Umatilla River	PCBs	PCB 114	Tissue Type	3	3	0.57	1.4	1.0	0.44
Umatilla River	PCBs	PCB 118	FS	3	3	0.26	0.98	0.51	0.40
Umatilla River	PCBs	PCB 118	Tissue Type	3	3	0.0100	0.049	0.028	0.020
Umatilla River	PCBs	PCB 123	FS	3	3	0.0075	0.023	0.013	0.0089
Umatilla River	PCBs	PCB 123	Tissue Type	3	3	0.00081	0.0017	0.00070	0.00025
Umatilla River	PCBs	PCB 126	FS	3	0	0.00061	0.00069	0.00032	0.000022
Umatilla River	PCBs	PCB 126	Tissue Type	3	0	0.13	0.28	0.20	0.074
Umatilla River	PCBs	PCB 156	FS	3	3	0.052	0.18	0.097	0.072
Umatilla River	PCBs	PCB 156	Tissue Type	3	3	0.00068	0.0022	0.00063	0.00041
Umatilla River	PCBs	PCB 157	FS	3	1	0.00073	0.065	0.022	0.037
Umatilla River	PCBs	PCB 157	Tissue Type	3	0	0.056	0.12	0.086	0.031
Umatilla River	PCBs	PCB 167	FS	3	3	0.021	0.078	0.042	0.031
Umatilla River	PCBs	PCB 167	Tissue Type	3	3	0.00054	0.0028	0.00088	0.00056
Umatilla River	PCBs	PCB 169	FS	3	1	0.00050	0.0044	0.0016	0.0024
Umatilla River	PCBs	PCB 169	Tissue Type	3	1	0.57	0.82	0.67	0.13
Umatilla River	PCBs	PCB 170	FS	3	3	0.23	0.64	0.39	0.22
Umatilla River	PCBs	PCB 170	Tissue Type	3	3	1.7	2.5	2.0	0.41
Umatilla River	PCBs	PCB 180	FS	3	3	0.71	1.9	1.2	0.63
Umatilla River	PCBs	PCB 180	Tissue Type	3	3	0.017	0.027	0.022	0.0053
Umatilla River	PCBs	PCB 189	FS	3	3	0.0061	0.020	0.011	0.0079
Umatilla River	PCBs	PCB 189	Tissue Type	3	3	2.6	3.0	1.4	0.10
Umatilla River	Pesticides	Aldrin	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	Aldrin	Tissue Type	3	0	2.6	3.0	1.4	0.10
Umatilla River	Pesticides	Alpha-BHC	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	Alpha-BHC	Tissue Type	3	0	2.6	3.0	1.4	0.10
Umatilla River	Pesticides	Alpha-Chlordene	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	Alpha-Chlordene	Tissue Type	3	0	7,200	16,000	11,000	4,700
Umatilla River	Pesticides	Beta-BHC	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	Beta-BHC	Tissue Type	3	0	9.4	13	5.4	0.99
Umatilla River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	cis-Chlordane (alpha-Chlordane)	Tissue Type	3	0	2.6	3.0	1.4	0.10
Umatilla River	Pesticides	cis-Nonachlor	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	cis-Nonachlor	Tissue Type	3	0	52	61	55	4.9
Umatilla River	Pesticides	DDD-o,p'	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	DDD-o,p'	Tissue Type	3	0	2.7	3.0	1.9	0.72
Umatilla River	Pesticides	DDE-o,p'	FS	3	1	2.3	2.9	1.8	1.00
Umatilla River	Pesticides	DDE-o,p'	Tissue Type	3	1	2.6	3.0	1.4	0.10

Appendix D-2: Tributary Summary Statistics
Mountain Whitefish

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Pesticides	DDT-o,p'	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	DDT-o,p'	Tissue Type	3	0	2.6	3.0	1.4	0.10
Umatilla River	Pesticides	DDD-p,p'	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	DDD-p,p'	Tissue Type	3	0	39	47	43	4.0
Umatilla River	Pesticides	DDE-p,p'	FS	3	3	16	30	22	7.1
Umatilla River	Pesticides	DDE-p,p'	Tissue Type	3	3	5.1	6.1	5.5	0.51
Umatilla River	Pesticides	DDT-p,p'	FS	3	3	2.6	2.8	2.7	0.10
Umatilla River	Pesticides	DDMU	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	DDMU	Tissue Type	3	0	2.6	3.0	1.4	0.10
Umatilla River	Pesticides	Delta-BHC	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	Delta-BHC	Tissue Type	3	0	9.4	13	5.4	0.99
Umatilla River	Pesticides	Endosulfan Sulfate	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	Endosulfan Sulfate	Tissue Type	3	0	9.4	13	5.4	0.99
Umatilla River	Pesticides	Gamma-Chlordane	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	Gamma-Chlordane	Tissue Type	3	0	2.6	3.0	1.4	0.10
Umatilla River	Pesticides	gamma-Chlordene	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	Gamma-Chlordene	Tissue Type	3	0	2.6	3.0	1.4	0.10
Umatilla River	Pesticides	Heptachlor	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	Heptachlor	Tissue Type	3	0	2.6	3.0	1.4	0.10
Umatilla River	Pesticides	Heptachlor Epoxide	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	Heptachlor Epoxide	Tissue Type	3	0	2.6	3.0	1.4	0.10
Umatilla River	Pesticides	Hexachlorobenzene	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	Hexachlorobenzene	Tissue Type	3	0	4.7	6.5	2.7	0.49
Umatilla River	Pesticides	Lindane	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	Lindane	Tissue Type	3	0	2,100	3,000	2,400	470
Umatilla River	Pesticides	Mirex	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	Mirex	Tissue Type	3	0	10	18	6.9	2.1
Umatilla River	Pesticides	Oxychlordane	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	Oxychlordane	Tissue Type	3	0	0.31	0.83	0.56	0.26
Umatilla River	Pesticides	Pentachloroanisol	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	Pentachloroanisol	Tissue Type	3	0	190	260	110	20
Umatilla River	Pesticides	Toxaphene	FS	3	0	67	73	35	1.6
Umatilla River	Pesticides	Toxaphene	Tissue Type	3	0	2.6	3.0	1.4	0.10
Umatilla River	Pesticides	trans-Nonachlor	FS	3	0	2.2	2.4	1.2	0.050
Umatilla River	Pesticides	trans-Nonachlor	Tissue Type	3	0	130	260	190	66
Umatilla River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	1,2,4-Trichlorobenzene	Tissue Type	3	0	4.7	6.5	2.7	0.49
Umatilla River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	1,2-Diphenylhydrazine	Tissue Type	3	0	0.00013	0.00014	0.00014	0.0000058
Umatilla River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	24	27	13	0.82
Umatilla River	Semivolatiles	2,4-Dinitrotoluene	Tissue Type	3	0	19	26	16	8.5
Umatilla River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	47	53	26	1.7
Umatilla River	Semivolatiles	2,6-Dinitrotoluene	Tissue Type	3	1	9.4	13	5.4	0.99
Umatilla River	Semivolatiles	2-Chloronaphthalene	FS	3	0	24	27	13	0.82
Umatilla River	Semivolatiles	2-Chloronaphthalene	Tissue Type	3	0	190	260	110	20
Umatilla River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	4-Bromophenyl-Phenylether	Tissue Type	3	0	190	260	110	20
Umatilla River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	4-Chlorophenyl-Phenylether	Tissue Type	3	0	4.7	6.5	2.7	0.49
Umatilla River	Semivolatiles	Acenaphthene	FS	3	0	24	27	13	0.82
Umatilla River	Semivolatiles	Acenaphthene	Tissue Type	3	0	4.7	6.5	2.7	0.49
Umatilla River	Semivolatiles	Acenaphthylene	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	Acenaphthylene	Tissue Type	3	0	2.6	3.0	1.4	0.10
Umatilla River	Semivolatiles	Anthracene	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	Anthracene	Tissue Type	3	0	50	50	25	0.49
Umatilla River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	Benzene, 1,2-dichloro-	Tissue Type	3	0	4.7	6.5	2.7	0.49
Umatilla River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	Benzene, 1,3-dichloro-	Tissue Type	3	0	4.7	6.5	2.7	0.49
Umatilla River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	Benzene, 1,4-dichloro-	Tissue Type	3	0	4.7	6.5	2.7	0.49
Umatilla River	Semivolatiles	Benzo(a)anthracene	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	Benzo(a)anthracene	Tissue Type	3	0	4.7	6.5	2.7	0.49
Umatilla River	Semivolatiles	Benzo(a)pyrene	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	Benzo(a)pyrene	Tissue Type	3	0	9.4	13	5.4	0.99
Umatilla River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	24	27	13	0.82
Umatilla River	Semivolatiles	Benzo(g,h,i)perylene	Tissue Type	3	0	4.7	6.5	2.7	0.49
Umatilla River	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	Benzo[b]Fluoranthene	Tissue Type	3	0	4.7	6.5	2.7	0.49
Umatilla River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	Benzo[k]fluoranthene	Tissue Type	3	0	4.0	4.0	2.0	0.49
Umatilla River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	24	27	13	0.82
Umatilla River	Semivolatiles	bis(2-Chloroisopropyl)ether	Tissue Type	3	0	4.0	10	6.3	4.0
Umatilla River	Semivolatiles	Chrysene	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	Chrysene	Tissue Type	3	0	2.6	3.0	1.4	0.10
Umatilla River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	24	27	13	0.82

Appendix D-2: Tributary Summary Statistics
Mountain Whitefish

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Semivolatiles	Dibenz[a,h]anthracene	Tissue Type	3	0	4.7	6.5	2.7	0.49
Umatilla River	Semivolatiles	Dibenzofuran	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	Dibenzofuran	Tissue Type	3	0	2.6	3.0	1.4	0.10
Umatilla River	Semivolatiles	Fluoranthene	FS	3	0	24	27	13	0.82
Umatilla River	Semivolatiles	Fluoranthene	Tissue Type	3	0	2.6	3.0	1.4	0.10
Umatilla River	Semivolatiles	9H-Fluorene	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	9H-Fluorene	Tissue Type	3	0	9.4	13	5.4	0.99
Umatilla River	Semivolatiles	Hexachlorobutadiene	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	Hexachlorobutadiene	Tissue Type	3	0	4.7	6.5	2.7	0.49
Umatilla River	Semivolatiles	Hexachloroethane	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	Hexachloroethane	Tissue Type	3	0	9.4	13	5.4	0.99
Umatilla River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	24	27	13	0.82
Umatilla River	Semivolatiles	Indeno(1,2,3-cd)pyrene	Tissue Type	3	0	10	17	14	3.8
Umatilla River	Semivolatiles	Naphthalene	FS	3	0	13	19	7.4	1.7
Umatilla River	Semivolatiles	Naphthalene	Tissue Type	3	0	4.7	6.5	2.7	0.49
Umatilla River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	Naphthalene, 1-methyl-	Tissue Type	3	0	4.7	6.5	2.7	0.49
Umatilla River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	Naphthalene, 2-methyl-	Tissue Type	3	0	280	350	300	38
Umatilla River	Semivolatiles	Nitrobenzene	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	n-Nitrosodiphenylamine	Tissue Type	3	0	0.00027	0.00035	0.00030	0.000046
Umatilla River	Semivolatiles	Phenanthrene	FS	3	0	12	13	6.4	0.42
Umatilla River	Semivolatiles	Phenanthrene	Tissue Type	3	0	190	260	110	20
Umatilla River	Semivolatiles	Pyrene	FS	3	0	24	27	13	0.82
Umatilla River	Semivolatiles	Pyrene	Tissue Type	3	0	9.4	13	5.4	0.99
Umatilla River	Semivolatiles	Retene	FS	3	0	24	27	13	0.82
Umatilla River	Semivolatiles	Retene	Tissue Type	3	0	920	1,600	1,200	340
Umatilla River	Metals	Chemical	Tissue Type	WB	Det Freq	0.00026	0.00031	0.00028	0.000025
Yakima River	Dioxin/furans	2,3,7,8-TCDD	FS	3	2	0.000050	0.00018	0.00011	0.000079
Yakima River	Dioxin/furans	2,3,7,8-TCDD	WB	3	3	0.00014	0.00023	0.00019	0.000045
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000020	0.00023	0.00015	0.00012
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	2	0.000030	0.00027	0.00016	0.00013
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	1	0.000030	0.000070	0.000037	0.000023
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	2	0.000010	0.000070	0.000045	0.000035
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.00011	0.00022	0.00017	0.000055
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000030	0.00029	0.00017	0.00014
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	0	0.000010	0.000070	0.000018	0.000015
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000010	0.000090	0.000052	0.000043
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.00015	0.00038	0.00027	0.00012
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00025	0.00038	0.00033	0.000068
Yakima River	Dioxin/furans	OCDD	FS	3	2	0.000090	0.0016	0.00066	0.00083
Yakima River	Dioxin/furans	OCDD	WB	3	2	0.000010	0.00061	0.00036	0.00032
Yakima River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.0033	0.0043	0.0038	0.00052
Yakima River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.0051	0.0062	0.0056	0.00054
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	2	0.000060	0.00013	0.000087	0.000051
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.00011	0.00015	0.00013	0.000021
Yakima River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	2	0.000020	0.00023	0.00014	0.00012
Yakima River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00025	0.00036	0.00030	0.000057
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	1	0.000020	0.000060	0.000023	0.000012
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	2	0.000010	0.000050	0.000032	0.000024
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	1	0.000020	0.000060	0.000020	0.000010
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	2	0.000010	0.000060	0.000035	0.000028
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000020	0.000060	0.000017	0.000012
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
Yakima River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	1	0.000020	0.000060	0.000027	0.000015
Yakima River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.000030	0.000050	0.000037	0.000012
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000020	0.00010	0.000032	0.000020
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000030	0.000080	0.000025	0.000013
Yakima River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000020	0.00010	0.000032	0.000020
Yakima River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000030	0.000080	0.000025	0.000013
Yakima River	Dioxin/furans	OCDF	FS	3	1	0.000050	0.000090	0.000043	0.0000076
Yakima River	Dioxin/furans	OCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
Yakima River	Guaiaacols/Pher	4-Chloroguaiacol	FS	3	0	770	990	450	59
Yakima River	Guaiaacols/Pher	4-Chloroguaiacol	WB	3	0	800	990	460	51
Yakima River	Guaiaacols/Pher	3,4-Dichloroguaiacol	FS	3	0	770	990	450	59
Yakima River	Guaiaacols/Pher	3,4-Dichloroguaiacol	WB	3	0	800	990	460	51
Yakima River	Guaiaacols/Pher	4,5-Dichloroguaiacol	FS	3	0	770	990	450	59
Yakima River	Guaiaacols/Pher	4,5-Dichloroguaiacol	WB	3	0	800	990	460	51
Yakima River	Guaiaacols/Pher	4,6-Dichloroguaiacol	FS	3	0	770	990	450	59
Yakima River	Guaiaacols/Pher	4,6-Dichloroguaiacol	WB	3	0	800	990	460	51
Yakima River	Guaiaacols/Pher	3,4,5-Trichloroguaiacol	FS	3	0	770	990	450	59
Yakima River	Guaiaacols/Pher	3,4,5-Trichloroguaiacol	WB	3	0	800	990	460	51
Yakima River	Guaiaacols/Pher	3,4,6-Trichloroguaiacol	FS	3	0	310	400	180	24
Yakima River	Guaiaacols/Pher	3,4,6-Trichloroguaiacol	WB	3	0	320	400	180	20
Yakima River	Guaiaacols/Pher	4,5,6-Trichloroguaiacol	FS	3	0	770	990	450	59
Yakima River	Guaiaacols/Pher	4,5,6-Trichloroguaiacol	WB	3	0	800	990	460	51

Appendix D-2: Tributary Summary Statistics
Mountain Whitefish

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Guaiacols/Pher	Tetrachloroguaiacol	FS	3	0	310	400	180	24
Yakima River	Guaiacols/Pher	Tetrachloroguaiacol	WB	3	0	320	400	180	20
Yakima River	Guaiacols/Pher	2-Chlorophenol	FS	3	0	310	400	180	24
Yakima River	Guaiacols/Pher	2-Chlorophenol	WB	3	0	320	400	180	20
Yakima River	Guaiacols/Pher	4-Chloro-3-methylphenol	FS	3	0	310	400	180	24
Yakima River	Guaiacols/Pher	4-Chloro-3-methylphenol	WB	3	0	320	400	180	20
Yakima River	Guaiacols/Pher	2,4-Dichlorophenol	FS	3	0	310	400	180	24
Yakima River	Guaiacols/Pher	2,4-Dichlorophenol	WB	3	0	320	400	180	20
Yakima River	Guaiacols/Pher	2,4-Dimethylphenol	FS	3	0	770	990	450	59
Yakima River	Guaiacols/Pher	2,4-Dimethylphenol	WB	3	0	800	990	460	51
Yakima River	Guaiacols/Pher	2,4,5-Trichlorophenol	FS	3	0	310	400	180	24
Yakima River	Guaiacols/Pher	2,4,5-Trichlorophenol	WB	3	0	320	400	180	20
Yakima River	Guaiacols/Pher	2,4,6-Trichlorophenol	FS	3	0	310	400	180	24
Yakima River	Guaiacols/Pher	2,4,6-Trichlorophenol	WB	3	0	320	400	180	20
Yakima River	Guaiacols/Pher	2,3,4,6-Tetrachlorophenol	FS	3	0	310	400	180	24
Yakima River	Guaiacols/Pher	2,3,4,6-Tetrachlorophenol	WB	3	0	320	400	180	20
Yakima River	Guaiacols/Pher	Pentachlorophenol	FS	3	0	310	400	180	24
Yakima River	Guaiacols/Pher	Pentachlorophenol	WB	3	0	320	400	180	20
Yakima River	Guaiacols/Pher	Phenol	FS	3	0	310	400	180	24
Yakima River	Guaiacols/Pher	Phenol	WB	3	0	320	400	180	20
Yakima River	Metals	Aluminum	FS	3	2	510	1,400	800	500
Yakima River	Metals	Aluminum	WB	3	3	1,800	5,600	4,100	2,000
Yakima River	Metals	Antimony	FS	3	0	50	50	25	0.00
Yakima River	Metals	Antimony	WB	3	0	50	50	25	0.00
Yakima River	Metals	Arsenic	FS	3	3	110	120	110	5.8
Yakima River	Metals	Arsenic	WB	3	3	120	130	130	5.8
Yakima River	Metals	Barium	FS	3	3	230	380	310	75
Yakima River	Metals	Barium	WB	3	3	610	680	640	32
Yakima River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Yakima River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Yakima River	Metals	Cadmium	FS	3	3	9.0	14	12	2.9
Yakima River	Metals	Cadmium	WB	3	3	47	54	50	3.6
Yakima River	Metals	Chromium	FS	3	0	100	100	50	0.00
Yakima River	Metals	Chromium	WB	3	2	100	210	120	81
Yakima River	Metals	Cobalt	FS	3	3	81	93	88	6.4
Yakima River	Metals	Cobalt	WB	3	3	160	200	180	23
Yakima River	Metals	Copper	FS	3	3	640	640	640	4.0
Yakima River	Metals	Copper	WB	3	3	660	730	690	37
Yakima River	Metals	Lead	FS	3	3	16	21	18	2.5
Yakima River	Metals	Lead	WB	3	3	31	43	38	6.2
Yakima River	Metals	Manganese	FS	3	3	1,000	1,500	1,200	240
Yakima River	Metals	Manganese	WB	3	3	2,900	5,100	3,900	1,100
Yakima River	Metals	Mercury	FS	3	3	120	140	130	6.7
Yakima River	Metals	Mercury	WB	3	2	100	130	92	39
Yakima River	Metals	Nickel	FS	3	1	30	40	23	14
Yakima River	Metals	Nickel	WB	3	3	40	180	100	72
Yakima River	Metals	Selenium	FS	3	3	670	720	690	25
Yakima River	Metals	Selenium	WB	3	3	940	1,000	1,000	49
Yakima River	Metals	Silver	FS	3	0	100	100	50	0.00
Yakima River	Metals	Silver	WB	3	0	100	100	50	0.00
Yakima River	Metals	Thallium	FS	3	0	50	50	25	0.00
Yakima River	Metals	Thallium	WB	3	0	50	50	25	0.00
Yakima River	Metals	Vanadium	FS	3	2	20	40	25	15
Yakima River	Metals	Vanadium	WB	3	3	74	150	120	43
Yakima River	Metals	Zinc	FS	3	3	13,000	14,000	13,000	320
Yakima River	Metals	Zinc	WB	3	3	25,000	27,000	26,000	1,100
Yakima River	PCBs	Aroclor 1016	FS	3	0	18	19	9.3	0.29
Yakima River	PCBs	Aroclor 1016	WB	3	0	18	19	9.3	0.29
Yakima River	PCBs	Aroclor 1221	FS	3	0	18	19	9.3	0.29
Yakima River	PCBs	Aroclor 1221	WB	3	0	18	19	9.3	0.29
Yakima River	PCBs	Aroclor 1232	FS	3	0	18	19	9.3	0.29
Yakima River	PCBs	Aroclor 1232	WB	3	0	18	19	9.3	0.29
Yakima River	PCBs	Aroclor 1242	FS	3	0	18	19	9.3	0.29
Yakima River	PCBs	Aroclor 1242	WB	3	0	18	19	9.3	0.29
Yakima River	PCBs	Aroclor 1248	FS	3	0	18	19	9.3	0.29
Yakima River	PCBs	Aroclor 1248	WB	3	0	18	19	9.3	0.29
Yakima River	PCBs	Aroclor 1254	FS	3	3	47	58	53	5.5
Yakima River	PCBs	Aroclor 1254	WB	3	3	34	46	39	6.1
Yakima River	PCBs	Aroclor 1260	FS	3	3	98	190	140	47
Yakima River	PCBs	Aroclor 1260	WB	3	3	92	130	110	20
Yakima River	PCBs	PCB 077	FS	3	3	0.11	0.14	0.13	0.017
Yakima River	PCBs	PCB 077	WB	3	3	0.15	0.18	0.16	0.016
Yakima River	PCBs	PCB 105	FS	3	3	2.9	3.1	3.0	0.12
Yakima River	PCBs	PCB 105	WB	3	3	3.4	3.6	3.5	0.11
Yakima River	PCBs	PCB 114	FS	3	3	0.22	0.25	0.23	0.016
Yakima River	PCBs	PCB 114	WB	3	3	0.25	0.34	0.29	0.042

Appendix D-2: Tributary Summary Statistics
Mountain Whitefish

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	PCBs	PCB 118	FS	3	3	6.3	6.5	6.4	0.10
Yakima River	PCBs	PCB 118	WB	3	3	6.6	7.2	7.0	0.31
Yakima River	PCBs	PCB 123	FS	3	3	0.092	0.11	0.097	0.0071
Yakima River	PCBs	PCB 123	WB	3	3	0.098	0.14	0.12	0.022
Yakima River	PCBs	PCB 126	FS	3	1	0.0056	0.016	0.0072	0.0075
Yakima River	PCBs	PCB 126	WB	3	1	0.0042	0.028	0.011	0.015
Yakima River	PCBs	PCB 156	FS	3	3	1.4	1.6	1.5	0.087
Yakima River	PCBs	PCB 156	WB	3	3	1.2	1.6	1.5	0.27
Yakima River	PCBs	PCB 157	FS	3	3	0.26	0.29	0.28	0.014
Yakima River	PCBs	PCB 157	WB	3	3	0.21	0.31	0.27	0.053
Yakima River	PCBs	PCB 167	FS	3	3	0.58	0.70	0.64	0.062
Yakima River	PCBs	PCB 167	WB	3	3	0.51	0.74	0.66	0.13
Yakima River	PCBs	PCB 169	FS	3	0	0.0024	0.0038	0.0016	0.00036
Yakima River	PCBs	PCB 169	WB	3	0	0.0025	0.0039	0.0015	0.00036
Yakima River	PCBs	PCB 170	FS	3	3	2.7	3.6	3.1	0.46
Yakima River	PCBs	PCB 170	WB	3	3	2.1	3.6	3.0	0.84
Yakima River	PCBs	PCB 180	FS	3	3	9.9	14	11	2.5
Yakima River	PCBs	PCB 180	WB	3	3	7.1	14	11	3.5
Yakima River	PCBs	PCB 189	FS	3	3	0.11	0.18	0.14	0.033
Yakima River	PCBs	PCB 189	WB	3	3	0.095	0.25	0.17	0.079
Yakima River	Pesticides	Aldrin	FS	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Aldrin	WB	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Alpha-BHC	FS	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Alpha-BHC	WB	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Alpha-Chlordane	FS	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Alpha-Chlordane	WB	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Beta-BHC	FS	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Beta-BHC	WB	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	cis-Nonachlor	FS	3	3	8.6	15	11	3.4
Yakima River	Pesticides	cis-Nonachlor	WB	3	3	6.0	10	8.2	2.0
Yakima River	Pesticides	DDD-o,p'	FS	3	3	3.5	6.7	5.0	1.6
Yakima River	Pesticides	DDD-o,p'	WB	3	3	4.9	6.3	5.7	0.71
Yakima River	Pesticides	DDE-o,p'	FS	3	3	7.6	11	9.4	1.7
Yakima River	Pesticides	DDE-o,p'	WB	3	2	1.9	8.9	6.2	4.5
Yakima River	Pesticides	DDT-o,p'	FS	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	DDT-o,p'	WB	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	DDD-p,p'	FS	3	3	37	56	46	9.6
Yakima River	Pesticides	DDD-p,p'	WB	3	3	47	58	54	5.9
Yakima River	Pesticides	DDE-p,p'	FS	3	3	580	910	760	170
Yakima River	Pesticides	DDE-p,p'	WB	3	3	580	770	660	97
Yakima River	Pesticides	DDT-p,p'	FS	3	3	44	58	50	7.4
Yakima River	Pesticides	DDT-p,p'	WB	3	3	31	49	41	9.2
Yakima River	Pesticides	DDMU	FS	3	3	16	28	23	6.2
Yakima River	Pesticides	DDMU	WB	3	3	22	27	24	2.5
Yakima River	Pesticides	Delta-BHC	FS	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Delta-BHC	WB	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Endosulfan Sulfate	FS	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Endosulfan Sulfate	WB	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Gamma-Chlordane	FS	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Gamma-Chlordane	WB	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	gamma-Chlordane	FS	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	gamma-Chlordane	WB	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Heptachlor	FS	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Heptachlor	WB	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Heptachlor Epoxide	FS	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Heptachlor Epoxide	WB	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Hexachlorobenzene	FS	3	3	0.84	1.3	1.1	0.24
Yakima River	Pesticides	Hexachlorobenzene	WB	3	3	0.94	1.2	1.0	0.14
Yakima River	Pesticides	Lindane	FS	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Lindane	WB	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Mirex	FS	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Mirex	WB	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Oxychlordane	FS	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Oxychlordane	WB	3	0	1.8	1.9	0.93	0.029
Yakima River	Pesticides	Pentachloroanisol	FS	3	2	1.5	1.9	1.4	0.50
Yakima River	Pesticides	Pentachloroanisol	WB	3	2	1.7	2.1	1.6	0.61
Yakima River	Pesticides	Toxaphene	FS	3	0	54	58	28	1.0
Yakima River	Pesticides	Toxaphene	WB	3	0	54	57	28	0.76
Yakima River	Pesticides	trans-Nonachlor	FS	3	3	4.1	7.4	5.6	1.7
Yakima River	Pesticides	trans-Nonachlor	WB	3	3	3.0	5.5	4.2	1.3
Yakima River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.0	9.9	4.6	0.51
Yakima River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.0	9.9	4.6	0.51

Appendix D-2: Tributary Summary Statistics
Mountain Whitefish

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	15	20	9.0	1.2
Yakima River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	16	20	9.2	1.0
Yakima River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	31	40	18	2.4
Yakima River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	32	40	18	2.0
Yakima River	Semivolatiles	2-Chloronaphthalene	FS	3	0	15	20	9.0	1.2
Yakima River	Semivolatiles	2-Chloronaphthalene	WB	3	0	16	20	9.2	1.0
Yakima River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.0	9.9	4.6	0.51
Yakima River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.0	9.9	4.6	0.51
Yakima River	Semivolatiles	Acenaphthene	FS	3	0	15	20	9.0	1.2
Yakima River	Semivolatiles	Acenaphthene	WB	3	1	16	31	17	12
Yakima River	Semivolatiles	Acenaphthylene	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	Acenaphthylene	WB	3	0	8.0	9.9	4.6	0.51
Yakima River	Semivolatiles	Anthracene	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	Anthracene	WB	3	0	8.0	9.9	4.6	0.51
Yakima River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.0	9.9	4.6	0.51
Yakima River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.0	9.9	4.6	0.51
Yakima River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.0	9.9	4.6	0.51
Yakima River	Semivolatiles	Benzo(a)anthracene	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.0	9.9	4.6	0.51
Yakima River	Semivolatiles	Benzo(a)pyrene	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.0	9.9	4.6	0.51
Yakima River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	15	20	9.0	1.2
Yakima River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	16	20	9.2	1.0
Yakima River	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	8.0	9.9	4.6	0.51
Yakima River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.0	9.9	4.6	0.51
Yakima River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	15	20	9.0	1.2
Yakima River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	16	20	9.2	1.0
Yakima River	Semivolatiles	Chrysene	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	Chrysene	WB	3	0	8.0	9.9	4.6	0.51
Yakima River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	15	20	9.0	1.2
Yakima River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	16	20	9.2	1.0
Yakima River	Semivolatiles	Dibenzofuran	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	Dibenzofuran	WB	3	0	8.0	9.9	4.6	0.51
Yakima River	Semivolatiles	Fluoranthene	FS	3	0	15	20	9.0	1.2
Yakima River	Semivolatiles	Fluoranthene	WB	3	0	16	20	9.2	1.0
Yakima River	Semivolatiles	9H-Fluorene	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	9H-Fluorene	WB	3	0	8.0	13	5.1	1.3
Yakima River	Semivolatiles	Hexachlorobutadiene	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.0	9.9	4.6	0.51
Yakima River	Semivolatiles	Hexachloroethane	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	Hexachloroethane	WB	3	0	8.0	9.9	4.6	0.51
Yakima River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	15	20	9.0	1.2
Yakima River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	16	20	9.2	1.0
Yakima River	Semivolatiles	Naphthalene	FS	3	0	9.4	15	5.6	1.5
Yakima River	Semivolatiles	Naphthalene	WB	3	0	8.6	13	5.5	1.0
Yakima River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.0	9.9	4.6	0.51
Yakima River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.0	10	4.7	0.60
Yakima River	Semivolatiles	Nitrobenzene	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	Nitrobenzene	WB	3	0	8.0	9.9	4.6	0.51
Yakima River	Semivolatiles	Phenanthrene	FS	3	0	7.7	9.9	4.5	0.58
Yakima River	Semivolatiles	Phenanthrene	WB	3	0	8.0	9.9	4.6	0.51
Yakima River	Semivolatiles	Pyrene	FS	3	0	15	20	9.0	1.2
Yakima River	Semivolatiles	Pyrene	WB	3	0	16	20	9.2	1.0
Yakima River	Semivolatiles	Retene	FS	3	0	15	20	9.0	1.2
Yakima River	Semivolatiles	Retene	WB	3	0	16	20	9.2	1.0

Appendix D-2: Tributary Summary Statistics
White Sturgeon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Dioxin/furans	2,3,7,8-TCDD	FW	13	13	0.00013	0.0014	0.00048	0.00036
Columbia River	Dioxin/furans	2,3,7,8-TCDD	WB	8	8	0.000060	0.0013	0.00069	0.00043
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDD	FW	13	11	0.000010	0.00018	0.000099	0.000061
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	8	3	0.000010	0.00017	0.000043	0.000058
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FW	13	12	0.000030	0.00016	0.000097	0.000049
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	8	2	0.000010	0.00013	0.000050	0.000049
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FW	13	11	0.000030	0.00028	0.00015	0.000086
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	8	6	0.000010	0.00043	0.00019	0.00015
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FW	13	9	0.000010	0.00010	0.000053	0.000029
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	8	4	0.000010	0.000070	0.000039	0.000019
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FW	13	13	0.00016	0.00068	0.00032	0.00015
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	8	7	0.000010	0.00084	0.00044	0.00026
Columbia River	Dioxin/furans	OCDD	FW	13	13	0.00034	0.0019	0.00069	0.00046
Columbia River	Dioxin/furans	OCDD	WB	8	8	0.00060	0.0035	0.0015	0.0010
Columbia River	Dioxin/furans	2,3,7,8-TCDF	FW	13	13	0.0062	0.054	0.020	0.014
Columbia River	Dioxin/furans	2,3,7,8-TCDF	WB	8	8	0.0080	0.047	0.021	0.015
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDF	FW	13	13	0.000080	0.00046	0.00025	0.00010
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	8	8	0.00012	0.00047	0.00032	0.00010
Columbia River	Dioxin/furans	2,3,4,7,8-PeCDF	FW	13	13	0.000060	0.00040	0.00022	0.000099
Columbia River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	8	8	0.00013	0.00053	0.00032	0.00013
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FW	13	12	0.000020	0.000080	0.000042	0.000017
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	8	7	0.000010	0.00015	0.000063	0.000048
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FW	13	12	0.000040	0.00011	0.000063	0.000024
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	8	6	0.000020	0.00015	0.000074	0.000042
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FW	13	7	0.000010	0.00012	0.000055	0.000042
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	8	4	0.000010	0.000070	0.000038	0.000023
Columbia River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FW	13	13	0.000030	0.00018	0.00011	0.000055
Columbia River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	8	5	0.000010	0.00019	0.000073	0.000075
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FW	13	12	0.000070	0.00021	0.00010	0.000041
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	8	5	0.000020	0.00021	0.00012	0.000072
Columbia River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FW	13	4	0.000010	0.000090	0.000025	0.000018
Columbia River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	8	1	0.000010	0.00017	0.000056	0.000055
Columbia River	Dioxin/furans	OCDF	FW	13	9	0.000010	0.00032	0.000088	0.000096
Columbia River	Dioxin/furans	OCDF	WB	8	5	0.000010	0.00095	0.00023	0.00031
Columbia River	Guaiacols/Phenols	4-Chloroguaiacol	FW	13	0	470	970	310	110
Columbia River	Guaiacols/Phenols	4-Chloroguaiacol	WB	8	0	500	1000	880	160
Columbia River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FW	13	0	470	970	310	110
Columbia River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	8	0	500	1000	880	160
Columbia River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FW	13	0	470	970	310	110
Columbia River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	8	0	500	1000	880	160
Columbia River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FW	13	0	470	970	310	110
Columbia River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	8	0	500	1000	880	160
Columbia River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FW	13	0	470	970	310	110
Columbia River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	8	0	500	1000	880	160
Columbia River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FW	13	0	190	390	120	43
Columbia River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	8	0	200	400	350	65
Columbia River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FW	13	0	470	970	310	110
Columbia River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	8	0	500	1000	880	160
Columbia River	Guaiacols/Phenols	Tetrachloroguaiacol	FW	13	0	190	390	120	43
Columbia River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	8	0	200	400	350	65
Columbia River	Guaiacols/Phenols	2-Chlorophenol	FW	13	0	190	390	120	43
Columbia River	Guaiacols/Phenols	2-Chlorophenol	WB	8	0	200	400	350	65
Columbia River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FW	13	0	190	390	120	43
Columbia River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	8	0	200	400	350	65
Columbia River	Guaiacols/Phenols	2,4-Dichlorophenol	FW	13	0	190	390	120	43
Columbia River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	8	0	200	400	350	65
Columbia River	Guaiacols/Phenols	2,4-Dimethylphenol	FW	13	0	470	970	310	110
Columbia River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	8	0	500	1000	880	160
Columbia River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FW	12	0	190	390	130	44
Columbia River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	8	0	200	400	350	65
Columbia River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FW	13	0	190	390	120	43
Columbia River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	8	0	200	400	350	65
Columbia River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FW	13	0	190	390	130	43
Columbia River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	8	0	200	400	350	65
Columbia River	Guaiacols/Phenols	Pentachlorophenol	FW	13	0	190	390	120	43
Columbia River	Guaiacols/Phenols	Pentachlorophenol	WB	8	0	200	400	350	65
Columbia River	Guaiacols/Phenols	Phenol	FW	13	0	190	390	120	43
Columbia River	Guaiacols/Phenols	Phenol	WB	8	1	340	530	400	59
Columbia River	Metals	Aluminum	FW	13	1	1,000	20,000	4,500	4,100
Columbia River	Metals	Aluminum	WB	8	7	1,000	184000	48,100	65,600
Columbia River	Metals	Antimony	FW	13	0	50	50	25	0.00
Columbia River	Metals	Antimony	WB	8	0	50	500	110	160
Columbia River	Metals	Arsenic	FW	13	13	180	640	330	120
Columbia River	Metals	Arsenic	WB	8	7	200	660	400	160
Columbia River	Metals	Barium	FW	13	8	200	630	260	170
Columbia River	Metals	Barium	WB	8	8	960	2,800	1,900	680

Appendix D-2: Tributary Summary Statistics
White Sturgeon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Metals	Beryllium	FW	13	1	4.0	4.0	2.1	0.28
Columbia River	Metals	Beryllium	WB	8	4	4.0	60	13	19
Columbia River	Metals	Cadmium	FW	13	1	4.0	4.5	2.1	0.40
Columbia River	Metals	Cadmium	WB	8	8	15	95	42	29
Columbia River	Metals	Chromium	FW	13	3	100	150	68	37
Columbia River	Metals	Chromium	WB	8	7	110	1,000	420	290
Columbia River	Metals	Cobalt	FW	13	12	1.0	150	26	44
Columbia River	Metals	Cobalt	WB	8	8	78	420	260	120
Columbia River	Metals	Copper	FW	13	11	210	410	240	83
Columbia River	Metals	Copper	WB	8	8	260	1,800	990	480
Columbia River	Metals	Lead	FW	13	5	10	29	8.9	7.0
Columbia River	Metals	Lead	WB	8	8	27	330	120	110
Columbia River	Metals	Manganese	FW	13	13	150	370	260	57
Columbia River	Metals	Manganese	WB	8	8	330	6,700	2,700	2,500
Columbia River	Metals	Mercury	FW	13	10	38	360	120	100
Columbia River	Metals	Mercury	WB	8	6	73	250	150	64
Columbia River	Metals	Nickel	FW	13	7	30	64	30	18
Columbia River	Metals	Nickel	WB	8	8	57	2,000	410	640
Columbia River	Metals	Selenium	FW	13	13	310	2,700	1,100	680
Columbia River	Metals	Selenium	WB	8	6	420	1,100	750	240
Columbia River	Metals	Silver	FW	13	0	100	100	50	0.00
Columbia River	Metals	Silver	WB	8	0	100	2,000	360	660
Columbia River	Metals	Thallium	FW	13	0	50	50	25	0.00
Columbia River	Metals	Thallium	WB	8	0	50	500	110	160
Columbia River	Metals	Vanadium	FW	13	5	10	20	10.0	3.6
Columbia River	Metals	Vanadium	WB	8	7	10	670	220	250
Columbia River	Metals	Zinc	FW	13	13	2,900	4,700	3,600	650
Columbia River	Metals	Zinc	WB	8	8	2,400	11,900	8,200	2,700
Columbia River	PCBs	Aroclor 1016	FW	13	0	18	20	9.5	0.42
Columbia River	PCBs	Aroclor 1016	WB	8	0	18	20	19	0.64
Columbia River	PCBs	Aroclor 1221	FW	13	0	18	20	9.5	0.42
Columbia River	PCBs	Aroclor 1221	WB	8	0	18	20	19	0.64
Columbia River	PCBs	Aroclor 1232	FW	13	0	18	20	9.5	0.42
Columbia River	PCBs	Aroclor 1232	WB	8	0	18	20	19	0.64
Columbia River	PCBs	Aroclor 1242	FW	13	0	18	20	9.5	0.42
Columbia River	PCBs	Aroclor 1242	WB	8	0	18	20	19	0.64
Columbia River	PCBs	Aroclor 1248	FW	13	0	18	20	9.5	0.42
Columbia River	PCBs	Aroclor 1248	WB	8	0	18	20	19	0.64
Columbia River	PCBs	Aroclor 1254	FW	13	13	10	190	61	49
Columbia River	PCBs	Aroclor 1254	WB	8	8	38	120	78	24
Columbia River	PCBs	Aroclor 1260	FW	13	13	13	200	58	49
Columbia River	PCBs	Aroclor 1260	WB	8	8	41	160	85	43
Columbia River	PCBs	PCB 77	FW	13	13	0.0011	0.061	0.016	0.016
Columbia River	PCBs	PCB 77	WB	8	8	0.0082	0.028	0.016	0.0061
Columbia River	PCBs	PCB 105	FW	13	13	0.35	9.6	2.4	2.3
Columbia River	PCBs	PCB 105	WB	8	8	2.0	5.6	3.6	1.4
Columbia River	PCBs	PCB 114	FW	13	13	0.028	0.75	0.20	0.19
Columbia River	PCBs	PCB 114	WB	8	8	0.16	0.47	0.28	0.12
Columbia River	PCBs	PCB 118	FW	13	13	0.27	14	2.8	3.4
Columbia River	PCBs	PCB 118	WB	8	8	2.2	7.2	4.3	1.7
Columbia River	PCBs	PCB 123	FW	13	13	0.0044	0.16	0.036	0.044
Columbia River	PCBs	PCB 123	WB	8	8	0.015	0.066	0.045	0.016
Columbia River	PCBs	PCB 126	FW	13	1	0.00074	0.0027	0.0010	0.00053
Columbia River	PCBs	PCB 126	WB	8	0	0.00050	0.0042	0.0019	0.0011
Columbia River	PCBs	PCB 156	FW	13	13	0.13	3.5	0.89	0.90
Columbia River	PCBs	PCB 156	WB	8	8	0.77	2.2	1.5	0.54
Columbia River	PCBs	PCB 157	FW	13	13	0.023	0.74	0.18	0.19
Columbia River	PCBs	PCB 157	WB	8	8	0.15	0.40	0.26	0.097
Columbia River	PCBs	PCB 167	FW	13	7	0.0012	0.17	0.028	0.048
Columbia River	PCBs	PCB 167	WB	8	8	0.015	0.13	0.044	0.036
Columbia River	PCBs	PCB 169	FW	13	0	0.00050	0.0040	0.00064	0.00050
Columbia River	PCBs	PCB 169	WB	8	1	0.0011	0.0047	0.0022	0.0014
Columbia River	PCBs	PCB 170	FW	13	13	0.36	6.8	1.8	1.8
Columbia River	PCBs	PCB 170	WB	8	8	1.5	4.4	2.7	1.1
Columbia River	PCBs	PCB 180	FW	13	13	1.2	23	5.7	5.8
Columbia River	PCBs	PCB 180	WB	8	8	4.8	16	9.4	4.1
Columbia River	PCBs	PCB 189	FW	13	13	0.015	0.31	0.071	0.079
Columbia River	PCBs	PCB 189	WB	8	8	0.060	0.16	0.11	0.040
Columbia River	Pesticides	Aldrin	FW	13	4	0.94	2.0	0.99	0.13
Columbia River	Pesticides	Aldrin	WB	8	4	0.97	2.0	1.6	0.46
Columbia River	Pesticides	Alpha-BHC	FW	13	0	1.8	2.0	0.95	0.042
Columbia River	Pesticides	Alpha-BHC	WB	8	0	1.8	2.0	1.9	0.064
Columbia River	Pesticides	Alpha-Chlordene	FW	13	0	1.8	2.0	0.95	0.042
Columbia River	Pesticides	Alpha-Chlordene	WB	8	0	1.8	2.0	1.9	0.064
Columbia River	Pesticides	Beta-BHC	FW	13	0	1.8	2.0	0.95	0.042
Columbia River	Pesticides	Beta-BHC	WB	8	0	1.8	2.0	1.9	0.064

Appendix D-2: Tributary Summary Statistics
White Sturgeon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Pesticides	cis-Chlordane (alpha-Chlordane)	FW	13	8	1.8	8.5	3.0	2.6
Columbia River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	8	7	2.0	9.2	3.9	2.3
Columbia River	Pesticides	cis-Nonachlor	FW	13	11	1.8	28	7.8	7.2
Columbia River	Pesticides	cis-Nonachlor	WB	8	8	5.1	13	9.5	2.7
Columbia River	Pesticides	DDD-o,p'	FW	13	13	2.2	24	10	6.5
Columbia River	Pesticides	DDD-o,p'	WB	8	8	4.9	22	13	6.1
Columbia River	Pesticides	DDE-o,p'	FW	13	11	1.9	20	5.2	4.8
Columbia River	Pesticides	DDE-o,p'	WB	8	8	5.1	12	7.4	2.5
Columbia River	Pesticides	DDT-o,p'	FW	13	7	1.8	6.0	2.4	1.8
Columbia River	Pesticides	DDT-o,p'	WB	8	2	1.8	6.3	2.6	1.6
Columbia River	Pesticides	DDD-p,p'	FW	13	13	16	350	92	89
Columbia River	Pesticides	DDD-p,p'	WB	8	8	78	200	130	44
Columbia River	Pesticides	DDE-p,p'	FW	13	13	100	1,400	480	310
Columbia River	Pesticides	DDE-p,p'	WB	8	8	400	1,100	620	230
Columbia River	Pesticides	DDT-p,p'	FW	13	12	1.7	17	5.0	4.1
Columbia River	Pesticides	DDT-p,p'	WB	8	8	3.9	38	15	12
Columbia River	Pesticides	DDMU	FW	13	13	2.0	46	10	11
Columbia River	Pesticides	DDMU	WB	8	6	1.9	16	8.1	5.2
Columbia River	Pesticides	Delta-BHC	FW	13	0	1.8	2.0	0.95	0.042
Columbia River	Pesticides	Delta-BHC	WB	8	0	1.8	2.0	1.9	0.064
Columbia River	Pesticides	Endosulfan Sulfate	FW	13	0	1.8	2.0	0.95	0.042
Columbia River	Pesticides	Endosulfan Sulfate	WB	8	0	1.8	2.0	1.9	0.064
Columbia River	Pesticides	Gamma-Chlordane	FW	13	11	1.8	8.1	4.4	2.4
Columbia River	Pesticides	Gamma-Chlordane	WB	8	8	1.9	17	6.9	4.8
Columbia River	Pesticides	Gamma-Chlordane	FW	13	0	1.8	2.0	0.95	0.042
Columbia River	Pesticides	Gamma-Chlordane	WB	8	0	1.8	2.0	1.9	0.064
Columbia River	Pesticides	Heptachlor	FW	13	0	1.8	2.0	0.95	0.042
Columbia River	Pesticides	Heptachlor	WB	8	0	1.8	2.0	1.9	0.064
Columbia River	Pesticides	Heptachlor Epoxide	FW	13	1	1.5	2.0	0.96	0.045
Columbia River	Pesticides	Heptachlor Epoxide	WB	8	0	1.8	2.0	1.9	0.064
Columbia River	Pesticides	Hexachlorobenzene	FW	13	13	1.8	13	5.6	3.9
Columbia River	Pesticides	Hexachlorobenzene	WB	8	7	1.8	19	9.4	6.6
Columbia River	Pesticides	Lindane	FW	13	0	1.8	2.0	0.95	0.042
Columbia River	Pesticides	Lindane	WB	8	0	1.8	2.0	1.9	0.064
Columbia River	Pesticides	Mirex	FW	13	0	1.8	2.0	0.95	0.042
Columbia River	Pesticides	Mirex	WB	8	0	1.8	2.0	1.9	0.064
Columbia River	Pesticides	Oxychlordane	FW	13	3	1.1	2.5	1.1	0.47
Columbia River	Pesticides	Oxychlordane	WB	8	4	0.95	2.5	1.8	0.45
Columbia River	Pesticides	Pentachloroanisol	FW	13	0	1.8	2.0	0.95	0.042
Columbia River	Pesticides	Pentachloroanisol	WB	8	0	1.8	2.0	1.9	0.064
Columbia River	Pesticides	Toxaphene	FW	13	0	53	59	28	1.2
Columbia River	Pesticides	Toxaphene	WB	8	0	55	60	57	1.6
Columbia River	Pesticides	trans-Nonachlor	FW	13	12	2.0	14	6.8	3.9
Columbia River	Pesticides	trans-Nonachlor	WB	8	6	1.9	18	7.7	5.3
Columbia River	Semivolatiles	1,2,4-Trichlorobenzene	FW	13	0	4.6	15	3.5	1.6
Columbia River	Semivolatiles	1,2,4-Trichlorobenzene	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	1,2-Diphenylhydrazine	FW	13	0	4.6	15	3.5	1.6
Columbia River	Semivolatiles	1,2-Diphenylhydrazine	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	2,4-Dinitrotoluene	FW	13	0	9.3	30	7.0	3.2
Columbia River	Semivolatiles	2,4-Dinitrotoluene	WB	8	0	9.2	92	30	28
Columbia River	Semivolatiles	2,6-Dinitrotoluene	FW	13	0	19	60	14	6.5
Columbia River	Semivolatiles	2,6-Dinitrotoluene	WB	8	0	18	180	61	55
Columbia River	Semivolatiles	2-Chloronaphthalene	FW	13	0	9.3	19	6.5	2.2
Columbia River	Semivolatiles	2-Chloronaphthalene	WB	8	0	9.2	92	30	28
Columbia River	Semivolatiles	4-Bromophenyl-Phenylether	FW	13	0	4.6	15	3.5	1.6
Columbia River	Semivolatiles	4-Bromophenyl-Phenylether	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	4-Chlorophenyl-Phenylether	FW	13	0	4.6	15	3.5	1.6
Columbia River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	Acenaphthene	FW	13	0	9.3	30	7.0	3.2
Columbia River	Semivolatiles	Acenaphthene	WB	8	0	9.2	92	30	28
Columbia River	Semivolatiles	Acenaphthylene	FW	13	0	4.6	15	3.5	1.6
Columbia River	Semivolatiles	Acenaphthylene	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	Anthracene	FW	13	0	4.6	15	3.5	1.6
Columbia River	Semivolatiles	Anthracene	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	Benzene, 1,2-dichloro-	FW	13	0	4.6	15	3.5	1.6
Columbia River	Semivolatiles	Benzene, 1,2-dichloro-	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	Benzene, 1,3-dichloro-	FW	13	0	4.6	15	3.5	1.6
Columbia River	Semivolatiles	Benzene, 1,3-dichloro-	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	Benzene, 1,4-dichloro-	FW	13	0	4.6	15	3.5	1.6
Columbia River	Semivolatiles	Benzene, 1,4-dichloro-	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	Benzo(a)anthracene	FW	13	0	4.6	25	4.3	3.0
Columbia River	Semivolatiles	Benzo(a)anthracene	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	Benzo(a)pyrene	FW	13	0	4.7	25	5.0	3.5
Columbia River	Semivolatiles	Benzo(a)pyrene	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	Benzo(g,h,i)perylene	FW	13	0	9.4	50	10.0	7.0
Columbia River	Semivolatiles	Benzo(g,h,i)perylene	WB	8	0	9.2	92	30	28

Appendix D-2: Tributary Summary Statistics
White Sturgeon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Semivolatiles	Benzo[b]Fluoranthene	FW	13	0	4.7	28	5.5	4.3
Columbia River	Semivolatiles	Benzo[b]Fluoranthene	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	Benzo[k]fluoranthene	FW	13	0	4.7	28	5.5	4.3
Columbia River	Semivolatiles	Benzo[k]fluoranthene	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	bis(2-Chloroisopropyl)ether	FW	13	0	9.3	30	7.0	3.2
Columbia River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	8	0	9.2	92	30	28
Columbia River	Semivolatiles	Chrysene	FW	13	0	4.6	25	4.3	3.0
Columbia River	Semivolatiles	Chrysene	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	Dibenz[a,h]anthracene	FW	13	0	9.4	50	10.0	7.0
Columbia River	Semivolatiles	Dibenz[a,h]anthracene	WB	8	0	9.2	92	30	28
Columbia River	Semivolatiles	Dibenzofuran	FW	13	0	4.6	15	3.5	1.6
Columbia River	Semivolatiles	Dibenzofuran	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	Fluoranthene	FW	13	0	9.3	30	7.0	3.2
Columbia River	Semivolatiles	Fluoranthene	WB	8	0	9.2	92	30	28
Columbia River	Semivolatiles	9H-Fluorene	FW	13	0	4.6	15	3.5	1.6
Columbia River	Semivolatiles	9H-Fluorene	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	Hexachlorobutadiene	FW	13	0	4.6	15	3.5	1.6
Columbia River	Semivolatiles	Hexachlorobutadiene	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	Hexachloroethane	FW	13	0	4.6	15	3.5	1.6
Columbia River	Semivolatiles	Hexachloroethane	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FW	13	0	9.4	50	10.0	7.0
Columbia River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	8	0	9.2	92	30	28
Columbia River	Semivolatiles	Naphthalene	FW	13	0	8.6	60	11	6.8
Columbia River	Semivolatiles	Naphthalene	WB	8	0	8.6	46	18	14
Columbia River	Semivolatiles	Naphthalene, 1-methyl-	FW	13	1	4.6	15	4.1	2.4
Columbia River	Semivolatiles	Naphthalene, 1-methyl-	WB	8	0	4.8	46	15	14
Columbia River	Semivolatiles	Naphthalene, 2-methyl-	FW	13	1	4.6	25	5.5	6.1
Columbia River	Semivolatiles	Naphthalene, 2-methyl-	WB	8	0	8.6	46	16	13
Columbia River	Semivolatiles	Nitrobenzene	FW	13	0	4.6	15	3.5	1.6
Columbia River	Semivolatiles	Nitrobenzene	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	Phenanthrene	FW	13	0	4.6	17	3.8	1.7
Columbia River	Semivolatiles	Phenanthrene	WB	8	0	4.6	46	15	14
Columbia River	Semivolatiles	Pyrene	FW	13	0	9.3	50	8.5	5.9
Columbia River	Semivolatiles	Pyrene	WB	8	0	9.2	92	30	28
Columbia River	Semivolatiles	Retene	FW	13	0	9.3	50	8.5	5.9
Columbia River	Semivolatiles	Retene	WB	8	0	9.2	92	30	28
Snake River	Dioxin/furans	2,3,7,8-TCDD	FW	3	3	0.000095	0.00063	0.00035	0.00027
Snake River	Dioxin/furans	1,2,3,7,8-PeCDD	FW	3	3	0.000080	0.00015	0.00011	0.000039
Snake River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FW	3	1	0.000020	0.00013	0.000048	0.000066
Snake River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FW	3	3	0.000070	0.00031	0.00021	0.00012
Snake River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FW	3	2	0.000020	0.000060	0.000033	0.000025
Snake River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FW	3	3	0.00015	0.00041	0.00028	0.00013
Snake River	Dioxin/furans	OCDD	FW	3	3	0.00043	0.00091	0.00061	0.00026
Snake River	Dioxin/furans	2,3,7,8-TCDF	FW	3	3	0.0025	0.0050	0.0042	0.0014
Snake River	Dioxin/furans	1,2,3,7,8-PeCDF	FW	3	3	0.00013	0.00018	0.00015	0.000029
Snake River	Dioxin/furans	2,3,4,7,8-PeCDF	FW	3	1	0.000015	0.00015	0.000059	0.000079
Snake River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FW	3	3	0.000035	0.000080	0.000062	0.000024
Snake River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FW	3	3	0.000050	0.000070	0.000062	0.000010
Snake River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FW	3	1	0.000020	0.000035	0.000018	0.000013
Snake River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FW	3	2	0.000020	0.00016	0.000065	0.000079
Snake River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FW	3	3	0.000080	0.00013	0.00011	0.000025
Snake River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FW	3	0	0.000020	0.000020	0.000010	0.00
Snake River	Dioxin/furans	OCDF	FW	3	1	0.000010	0.000030	0.000013	0.000013
Snake River	Guaiacols/Phenols	4-Chloroguaiacol	FW	3	0	740	920	420	48
Snake River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FW	3	0	740	920	420	48
Snake River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FW	3	0	740	920	420	48
Snake River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FW	3	0	740	920	420	48
Snake River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FW	3	0	740	920	420	48
Snake River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FW	3	0	290	370	170	19
Snake River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FW	3	0	740	920	420	48
Snake River	Guaiacols/Phenols	Tetrachloroguaiacol	FW	3	0	290	370	170	19
Snake River	Guaiacols/Phenols	2-Chlorophenol	FW	3	0	290	370	170	19
Snake River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FW	3	0	290	370	170	19
Snake River	Guaiacols/Phenols	2,4-Dichlorophenol	FW	3	0	290	370	170	19
Snake River	Guaiacols/Phenols	2,4-Dimethylphenol	FW	3	0	740	920	420	48
Snake River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FW	3	0	290	350	160	15
Snake River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FW	3	0	290	350	160	15
Snake River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FW	3	0	290	370	170	19
Snake River	Guaiacols/Phenols	Pentachlorophenol	FW	3	0	290	370	170	19
Snake River	Guaiacols/Phenols	Phenol	FW	3	0	290	370	170	19
Snake River	Metals	Aluminum	FW	3	0	1,000	1,000	500	0.00
Snake River	Metals	Antimony	FW	3	0	50	50	25	0.00
Snake River	Metals	Arsenic	FW	3	3	150	240	200	49
Snake River	Metals	Barium	FW	3	1	200	290	160	110
Snake River	Metals	Beryllium	FW	3	1	4.0	7.4	3.3	2.3
Snake River	Metals	Cadmium	FW	3	1	4.0	5.5	2.8	1.4

Appendix D-2: Tributary Summary Statistics
White Sturgeon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Snake River	Metals	Chromium	FW	3	0	100	100	50	0.00
Snake River	Metals	Cobalt	FW	3	3	3.7	56	28	26
Snake River	Metals	Copper	FW	3	3	240	390	300	79
Snake River	Metals	Lead	FW	3	0	10	10	5.0	0.00
Snake River	Metals	Manganese	FW	3	3	210	370	270	86
Snake River	Metals	Mercury	FW	3	3	100	430	310	180
Snake River	Metals	Nickel	FW	3	3	32	290	170	130
Snake River	Metals	Selenium	FW	3	3	430	1,000	700	300
Snake River	Metals	Silver	FW	3	0	100	200	67	29
Snake River	Metals	Thallium	FW	3	0	50	50	25	0.00
Snake River	Metals	Vanadium	FW	3	1	10	10	5.8	1.4
Snake River	Metals	Zinc	FW	3	3	4,200	4,900	4,600	400
Snake River	PCBs	Aroclor 1016	FW	3	0	19	20	9.7	0.29
Snake River	PCBs	Aroclor 1221	FW	3	0	19	20	9.7	0.29
Snake River	PCBs	Aroclor 1232	FW	3	0	19	20	9.7	0.29
Snake River	PCBs	Aroclor 1242	FW	3	0	19	20	9.7	0.29
Snake River	PCBs	Aroclor 1248	FW	3	0	19	20	9.7	0.29
Snake River	PCBs	Aroclor 1254	FW	3	3	26	48	38	11
Snake River	PCBs	Aroclor 1260	FW	3	2	19	73	39	32
Snake River	PCBs	PCB 077	FW	3	3	0.0049	0.031	0.016	0.014
Snake River	PCBs	PCB 105	FW	3	3	0.63	3.0	1.8	1.2
Snake River	PCBs	PCB 114	FW	3	3	0.050	0.33	0.18	0.14
Snake River	PCBs	PCB 118	FW	3	3	0.84	5.2	2.9	2.2
Snake River	PCBs	PCB 123	FW	3	3	0.012	0.076	0.034	0.036
Snake River	PCBs	PCB 126	FW	3	0	0.0022	0.0044	0.0016	0.00058
Snake River	PCBs	PCB 156	FW	3	3	0.23	1.3	0.72	0.51
Snake River	PCBs	PCB 157	FW	3	3	0.042	0.22	0.13	0.089
Snake River	PCBs	PCB 167	FW	3	3	0.016	0.16	0.072	0.076
Snake River	PCBs	PCB 169	FW	3	0	0.0010	0.0024	0.00082	0.00034
Snake River	PCBs	PCB 170	FW	3	3	0.42	2.4	1.3	1.00
Snake River	PCBs	PCB 180	FW	3	3	1.2	7.9	4.2	3.4
Snake River	PCBs	PCB 189	FW	3	3	0.016	0.098	0.053	0.042
Snake River	Pesticides	Aldrin	FW	3	0	1.9	2.0	0.97	0.029
Snake River	Pesticides	Alpha-BHC	FW	3	0	1.9	2.0	0.97	0.029
Snake River	Pesticides	Alpha-Chlordane	FW	3	1	1.9	2.4	1.3	0.52
Snake River	Pesticides	Beta-BHC	FW	3	0	1.9	2.0	0.97	0.029
Snake River	Pesticides	cis-Chlordane (alpha-Chlordane)	FW	3	2	1.9	11	4.9	5.4
Snake River	Pesticides	cis-Nonachlor	FW	3	2	1.9	16	8.5	7.5
Snake River	Pesticides	DDD-o,p'	FW	3	3	4.0	7.6	5.8	1.8
Snake River	Pesticides	DDE-o,p'	FW	3	3	1.5	11	6.0	4.8
Snake River	Pesticides	DDT-o,p'	FW	3	2	1.9	6.9	4.1	3.0
Snake River	Pesticides	DDD-p,p'	FW	3	3	25	55	39	15
Snake River	Pesticides	DDE-p,p'	FW	3	3	150	770	440	310
Snake River	Pesticides	DDT-p,p'	FW	3	3	16	31	23	7.7
Snake River	Pesticides	DDMU	FW	3	3	2.6	18	8.9	8.1
Snake River	Pesticides	Delta-BHC	FW	3	0	1.9	2.0	0.97	0.029
Snake River	Pesticides	Endosulfan Sulfate	FW	3	0	2.0	2.0	1.0	na
Snake River	Pesticides	Gamma-Chlordane	FW	3	3	1.6	2.5	2.0	0.46
Snake River	Pesticides	Gamma-Chlordene	FW	3	0	1.9	2.0	0.97	0.029
Snake River	Pesticides	Heptachlor	FW	3	0	1.9	2.0	0.97	0.029
Snake River	Pesticides	Heptachlor Epoxide	FW	3	0	2.0	2.0	1.0	na
Snake River	Pesticides	Hexachlorobenzene	FW	3	3	2.6	6.5	4.6	2.0
Snake River	Pesticides	Lindane	FW	3	0	1.9	2.0	0.97	0.029
Snake River	Pesticides	Mirex	FW	3	0	1.9	2.0	0.97	0.029
Snake River	Pesticides	Oxychlordane	FW	3	0	1.9	2.0	0.97	0.029
Snake River	Pesticides	Pentachloroanisol	FW	3	0	1.9	2.0	0.97	0.029
Snake River	Pesticides	Toxaphene	FW	3	0	56	60	29	0.88
Snake River	Pesticides	trans-Nonachlor	FW	3	2	1.9	16	7.4	7.8
Snake River	Semivolatiles	1,2,4-Trichlorobenzene	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	1,2-Diphenylhydrazine	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	2,4-Dinitrotoluene	FW	3	0	10	18	7.7	2.2
Snake River	Semivolatiles	2,6-Dinitrotoluene	FW	3	0	21	37	15	4.5
Snake River	Semivolatiles	2-Chloronaphthalene	FW	3	0	10	18	7.7	2.2
Snake River	Semivolatiles	4-Bromophenyl-Phenylether	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	4-Chlorophenyl-Phenylether	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	Acenaphthene	FW	3	0	10	18	7.7	2.2
Snake River	Semivolatiles	Acenaphthylene	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	Anthracene	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	Benzene, 1,2-dichloro-	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	Benzene, 1,3-dichloro-	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	Benzene, 1,4-dichloro-	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	Benzo(a)anthracene	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	Benzo(a)pyrene	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	Benzo(g,h,i)perylene	FW	3	0	10	18	7.7	2.2
Snake River	Semivolatiles	Benzo[b]Fluoranthene	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	Benzo[k]fluoranthene	FW	3	0	5.2	9.1	3.8	1.1

Appendix D-2: Tributary Summary Statistics
White Sturgeon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Snake River	Semivolatiles	bis(2-Chloroisopropyl)ether	FW	3	0	10	18	7.7	2.2
Snake River	Semivolatiles	Chrysene	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	Dibenz[a,h]anthracene	FW	3	0	10	18	7.7	2.2
Snake River	Semivolatiles	Dibenzofuran	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	Fluoranthene	FW	3	0	10	18	7.7	2.2
Snake River	Semivolatiles	9H-Fluorene	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	Hexachlorobutadiene	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	Hexachloroethane	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FW	3	0	10	18	7.7	2.2
Snake River	Semivolatiles	Naphthalene	FW	3	0	19	23	11	1.1
Snake River	Semivolatiles	Naphthalene, 1-methyl-	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	Naphthalene, 2-methyl-	FW	3	0	6.4	9.1	4.0	0.75
Snake River	Semivolatiles	Nitrobenzene	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	Phenanthrene	FW	3	0	5.2	9.1	3.8	1.1
Snake River	Semivolatiles	Pyrene	FW	3	0	10	18	7.7	2.2
Snake River	Semivolatiles	Retene	FW	3	0	10	18	7.7	2.2

Appendix D-2: Tributary Summary Statistics
Walleye

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Dioxin/furans	2,3,7,8-TCDD	WB	2	2	0.00036	0.00042	0.00039	0.000042
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	2	2	0.00019	0.00025	0.00022	0.000042
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	2	2	0.000020	0.000040	0.000030	0.000014
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	2	2	0.00012	0.00017	0.00015	0.000035
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	2	2	0.000030	0.000060	0.000045	0.000021
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	2	2	0.00011	0.00013	0.00012	0.000014
Columbia River	Dioxin/furans	OCDD	WB	2	2	0.00015	0.00016	0.00016	0.0000071
Columbia River	Dioxin/furans	2,3,7,8-TCDF	WB	2	2	0.0043	0.0055	0.0049	0.00087
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	2	2	0.00012	0.00015	0.00014	0.000021
Columbia River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	2	2	0.00020	0.00024	0.00022	0.000028
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	2	2	0.000030	0.000030	0.000030	0.00
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	2	1	0.000010	0.000030	0.000018	0.000018
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	2	0	0.000010	0.000010	0.0000050	0.00
Columbia River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	2	2	0.000040	0.000040	0.000040	0.00
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	2	0	0.000020	0.000020	0.000010	0.00
Columbia River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	2	0	0.000020	0.000020	0.000010	0.00
Columbia River	Dioxin/furans	OCDF	WB	2	0	0.000010	0.000010	0.0000050	0.00
Columbia River	Guaiacols/Phenols	4-Chloroguaiacol	WB	2	0	960	990	490	8.8
Columbia River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	2	0	960	990	490	8.8
Columbia River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	2	0	960	990	490	8.8
Columbia River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	2	0	960	990	490	8.8
Columbia River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	2	0	960	990	490	8.8
Columbia River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	2	0	390	400	200	3.5
Columbia River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	2	0	960	990	490	8.8
Columbia River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	2	0	390	400	200	3.5
Columbia River	Guaiacols/Phenols	2-Chlorophenol	WB	2	0	390	400	200	3.5
Columbia River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	2	0	390	400	200	3.5
Columbia River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	2	0	390	400	200	3.5
Columbia River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	2	0	960	990	490	8.8
Columbia River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	2	0	390	400	200	3.5
Columbia River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	2	0	390	400	200	3.5
Columbia River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	2	0	390	400	200	3.5
Columbia River	Guaiacols/Phenols	Pentachlorophenol	WB	2	0	390	400	200	3.5
Columbia River	Guaiacols/Phenols	Phenol	WB	2	0	390	400	200	3.5
Columbia River	Metals	Aluminum	WB	2	0	1,000	1,000	500	0.00
Columbia River	Metals	Antimony	WB	2	0	50	50	25	0.00
Columbia River	Metals	Arsenic	WB	2	2	490	510	500	13
Columbia River	Metals	Barium	WB	2	2	640	860	750	150
Columbia River	Metals	Beryllium	WB	2	0	4.0	4.0	2.0	0.00
Columbia River	Metals	Cadmium	WB	2	2	7.0	7.9	7.5	0.64
Columbia River	Metals	Chromium	WB	2	2	100	120	110	14
Columbia River	Metals	Cobalt	WB	2	2	69	80	75	7.8
Columbia River	Metals	Copper	WB	2	2	980	5,700	3,300	3,300
Columbia River	Metals	Lead	WB	2	2	65	490	280	300
Columbia River	Metals	Manganese	WB	2	2	970	970	970	4.2
Columbia River	Metals	Mercury	WB	2	2	200	220	210	17
Columbia River	Metals	Nickel	WB	2	2	130	250	190	90
Columbia River	Metals	Selenium	WB	2	2	470	540	510	49
Columbia River	Metals	Silver	WB	2	0	100	100	50	0.00
Columbia River	Metals	Thallium	WB	2	0	50	50	25	0.00
Columbia River	Metals	Vanadium	WB	2	2	11	12	12	0.71
Columbia River	Metals	Zinc	WB	2	2	14,000	15,000	14,000	920
Columbia River	PCBs	Aroclor 1016	WB	2	0	18	19	9.3	0.35
Columbia River	PCBs	Aroclor 1221	WB	2	0	18	19	9.3	0.35
Columbia River	PCBs	Aroclor 1232	WB	2	0	18	19	9.3	0.35
Columbia River	PCBs	Aroclor 1242	WB	2	0	18	19	9.3	0.35
Columbia River	PCBs	Aroclor 1248	WB	2	0	18	19	9.3	0.35
Columbia River	PCBs	Aroclor 1254	WB	2	2	54	98	76	31
Columbia River	PCBs	Aroclor 1260	WB	2	2	49	61	55	8.5
Columbia River	PCBs	PCB 077	WB	2	2	0.081	0.091	0.086	0.0074
Columbia River	PCBs	PCB 105	WB	2	2	2.7	5.3	4.0	1.9
Columbia River	PCBs	PCB 114	WB	2	2	0.23	0.51	0.37	0.19
Columbia River	PCBs	PCB 118	WB	2	2	5.2	10	7.7	3.5
Columbia River	PCBs	PCB 123	WB	2	2	0.081	0.23	0.15	0.10
Columbia River	PCBs	PCB 126	WB	2	2	0.0089	0.018	0.013	0.0064
Columbia River	PCBs	PCB 156	WB	2	2	1.1	2.3	1.7	0.83
Columbia River	PCBs	PCB 157	WB	2	2	0.22	0.45	0.34	0.17
Columbia River	PCBs	PCB 167	WB	2	2	0.36	0.67	0.52	0.22
Columbia River	PCBs	PCB 169	WB	2	0	0.0024	0.0025	0.0012	0.000064
Columbia River	PCBs	PCB 170	WB	2	2	1.9	2.8	2.3	0.63
Columbia River	PCBs	PCB 180	WB	2	2	5.0	6.9	6.0	1.4
Columbia River	PCBs	PCB 189	WB	2	2	0.059	0.095	0.077	0.026
Columbia River	Pesticides	Aldrin	WB	2	0	1.8	1.9	0.93	0.035
Columbia River	Pesticides	Alpha-BHC	WB	2	0	1.8	1.9	0.93	0.035
Columbia River	Pesticides	Alpha-Chlordene	WB	2	0	1.8	1.9	0.93	0.035
Columbia River	Pesticides	Beta-BHC	WB	2	0	1.8	1.9	0.93	0.035

Appendix D-2: Tributary Summary Statistics
Walleye

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	2	2	3.5	3.5	3.5	0.00
Columbia River	Pesticides	cis-Nonachlor	WB	2	2	3.5	4.3	3.9	0.57
Columbia River	Pesticides	DDD-o,p'	WB	2	2	6.6	7.3	7.0	0.49
Columbia River	Pesticides	DDE-o,p'	WB	2	2	7.9	12	10.0	2.9
Columbia River	Pesticides	DDT-o,p'	WB	2	0	1.8	1.9	0.93	0.035
Columbia River	Pesticides	DDD-p,p'	WB	2	2	51	57	54	4.2
Columbia River	Pesticides	DDE-p,p'	WB	2	2	440	440	440	0.00
Columbia River	Pesticides	DDT-p,p'	WB	2	2	6.6	9.1	7.9	1.8
Columbia River	Pesticides	DDMU	WB	2	2	7.9	8.3	8.1	0.28
Columbia River	Pesticides	Delta-BHC	WB	2	0	1.8	1.9	0.93	0.035
Columbia River	Pesticides	Endosulfan Sulfate	WB	2	0	1.8	1.9	0.93	0.035
Columbia River	Pesticides	Gamma-Chlordane	WB	2	2	4.0	4.3	4.2	0.21
Columbia River	Pesticides	Gamma-Chlordene	WB	2	0	1.8	1.9	0.93	0.035
Columbia River	Pesticides	Heptachlor	WB	2	0	1.8	1.9	0.93	0.035
Columbia River	Pesticides	Heptachlor Epoxide	WB	2	0	1.8	1.9	0.93	0.035
Columbia River	Pesticides	Hexachlorobenzene	WB	2	2	1.9	3.8	2.9	1.3
Columbia River	Pesticides	Lindane	WB	2	0	1.8	1.9	0.93	0.035
Columbia River	Pesticides	Mirex	WB	2	2	3.0	4.1	3.6	0.78
Columbia River	Pesticides	Oxychlordane	WB	2	2	1.6	2.4	2.0	0.57
Columbia River	Pesticides	Pentachloroanisole	WB	2	0	1.8	1.9	0.93	0.035
Columbia River	Pesticides	Toxaphene	WB	2	0	55	56	28	0.35
Columbia River	Pesticides	trans-Nonachlor	WB	2	2	8.3	8.6	8.5	0.21
Columbia River	Semivolatiles	1,2,4-Trichlorobenzene	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	1,2-Diphenylhydrazine	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	2,4-Dinitrotoluene	WB	2	0	19	20	9.8	0.21
Columbia River	Semivolatiles	2,6-Dinitrotoluene	WB	2	0	38	40	20	0.42
Columbia River	Semivolatiles	2-Chloronaphthalene	WB	2	0	19	20	9.8	0.21
Columbia River	Semivolatiles	4-Bromophenyl-Phenylether	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	Acenaphthene	WB	2	0	19	20	9.8	0.21
Columbia River	Semivolatiles	Acenaphthylene	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	Anthracene	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	Benzene, 1,2-dichloro-	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	Benzene, 1,3-dichloro-	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	Benzene, 1,4-dichloro-	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	Benzo(a)anthracene	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	Benzo(a)pyrene	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	Benzo(g,h,i)perylene	WB	2	0	19	20	9.8	0.21
Columbia River	Semivolatiles	Benzo[b]fluoranthene	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	Benzo[k]fluoranthene	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	2	0	19	20	9.8	0.21
Columbia River	Semivolatiles	Chrysene	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	Dibenz[a,h]anthracene	WB	2	0	19	20	9.8	0.21
Columbia River	Semivolatiles	Dibenzofuran	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	Fluoranthene	WB	2	0	19	20	9.8	0.21
Columbia River	Semivolatiles	9H-Fluorene	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	Hexachlorobutadiene	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	Hexachloroethane	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	2	0	19	20	9.8	0.21
Columbia River	Semivolatiles	Naphthalene	WB	2	0	20	28	12	2.9
Columbia River	Semivolatiles	Naphthalene, 1-methyl-	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	Naphthalene, 2-methyl-	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	Nitrobenzene	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	Phenanthrene	WB	2	0	9.6	9.9	4.9	0.11
Columbia River	Semivolatiles	Pyrene	WB	2	0	19	20	9.8	0.21
Columbia River	Semivolatiles	Retene	WB	2	0	19	20	9.8	0.21
Umatilla River	Dioxin/furans	2,3,7,8-TCDD	FS	3	3	0.000070	0.000080	0.000077	0.0000058
Umatilla River	Dioxin/furans	2,3,7,8-TCDD	WB	1	1	0.00038	0.00038	0.00038	na
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000010	0.00012	0.000078	0.000064
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	1	1	0.00027	0.00027	0.00027	na
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	3	0.000080	0.000090	0.000087	0.0000058
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	1	1	0.00013	0.00013	0.00013	na
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.000040	0.000050	0.000047	0.0000058
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	1	1	0.00020	0.00020	0.00020	na
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000010	0.000020	0.000015	0.0000087
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	1	1	0.000080	0.000080	0.000080	na
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000010	0.00010	0.000065	0.000052
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	1	1	0.00028	0.00028	0.00028	na
Umatilla River	Dioxin/furans	OCDD	FS	3	2	0.000010	0.00016	0.000098	0.000082
Umatilla River	Dioxin/furans	OCDD	WB	1	1	0.00032	0.00032	0.00032	na
Umatilla River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00060	0.00075	0.00067	0.000076
Umatilla River	Dioxin/furans	2,3,7,8-TCDF	WB	1	1	0.0038	0.0038	0.0038	na
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.000030	0.000040	0.000033	0.0000058
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	1	1	0.00014	0.00014	0.00014	na
Umatilla River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.000020	0.000040	0.000030	0.000010
Umatilla River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	1	1	0.00019	0.00019	0.00019	na

Appendix D-2: Tributary Summary Statistics
Walleye

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.000050	0.00
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	1	1	0.000040	0.000040	0.000040	na
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000020	0.000030	0.000023	0.0000058
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	1	1	0.000050	0.000050	0.000050	na
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	3	0.000050	0.000060	0.000053	0.0000058
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	1	1	0.00011	0.00011	0.00011	na
Umatilla River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	3	0.00012	0.00013	0.00012	0.0000058
Umatilla River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	1	1	0.00016	0.00016	0.00016	na
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000010	0.000070	0.000042	0.000033
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	1	1	0.00011	0.00011	0.00011	na
Umatilla River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Umatilla River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	1	1	0.000040	0.000040	0.000040	na
Umatilla River	Dioxin/furans	OCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Umatilla River	Dioxin/furans	OCDF	WB	1	1	0.00010	0.00010	0.00010	na
Umatilla River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	520	960	340	120
Umatilla River	Guaiacols/Phenols	4-Chloroguaiacol	WB	1	0	510	510	250	na
Umatilla River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	520	960	340	120
Umatilla River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	1	0	510	510	250	na
Umatilla River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	520	960	340	120
Umatilla River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	1	0	510	510	250	na
Umatilla River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	520	960	340	120
Umatilla River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	1	0	510	510	250	na
Umatilla River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	520	960	340	120
Umatilla River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	1	0	510	510	250	na
Umatilla River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	210	380	130	50
Umatilla River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	1	0	200	200	100	na
Umatilla River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	520	960	340	120
Umatilla River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	1	0	510	510	250	na
Umatilla River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	210	380	130	50
Umatilla River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	1	0	200	200	100	na
Umatilla River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	210	380	130	50
Umatilla River	Guaiacols/Phenols	2-Chlorophenol	WB	1	0	200	200	100	na
Umatilla River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	210	380	130	50
Umatilla River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	1	0	200	200	100	na
Umatilla River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	210	380	130	50
Umatilla River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	1	0	200	200	100	na
Umatilla River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	520	960	340	120
Umatilla River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	1	0	510	510	250	na
Umatilla River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	210	380	130	50
Umatilla River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	1	0	200	200	100	na
Umatilla River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	210	380	130	50
Umatilla River	Guaiacols/Phenols	Pentachlorophenol	WB	1	0	200	200	100	na
Umatilla River	Guaiacols/Phenols	Phenol	FS	3	0	210	380	130	50
Umatilla River	Guaiacols/Phenols	Phenol	WB	1	0	200	200	100	na
Umatilla River	Metals	Aluminum	FS	3	3	2,300	2,700	2,500	200
Umatilla River	Metals	Aluminum	WB	1	1	6,200	6,200	6,200	na
Umatilla River	Metals	Antimony	FS	3	0	50	50	25	0.00
Umatilla River	Metals	Antimony	WB	1	0	50	50	25	na
Umatilla River	Metals	Arsenic	FS	3	3	290	400	360	64
Umatilla River	Metals	Arsenic	WB	1	1	480	480	480	na
Umatilla River	Metals	Barium	FS	3	3	230	240	240	5.8
Umatilla River	Metals	Barium	WB	1	1	520	520	520	na
Umatilla River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Umatilla River	Metals	Beryllium	WB	1	0	4.0	4.0	2.0	na
Umatilla River	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
Umatilla River	Metals	Cadmium	WB	1	1	7.4	7.4	7.4	na
Umatilla River	Metals	Chromium	FS	3	2	100	110	90	35
Umatilla River	Metals	Chromium	WB	1	1	120	120	120	na
Umatilla River	Metals	Cobalt	FS	3	3	8.0	9.0	8.3	0.58
Umatilla River	Metals	Cobalt	WB	1	1	19	19	19	na
Umatilla River	Metals	Copper	FS	3	3	500	620	570	60
Umatilla River	Metals	Copper	WB	1	1	730	730	730	na
Umatilla River	Metals	Lead	FS	3	0	10	10	5.0	0.00
Umatilla River	Metals	Lead	WB	1	0	10	10	5.0	na
Umatilla River	Metals	Manganese	FS	3	3	350	390	370	18
Umatilla River	Metals	Manganese	WB	1	1	900	900	900	na
Umatilla River	Metals	Mercury	FS	3	3	160	200	180	23
Umatilla River	Metals	Mercury	WB	1	1	120	120	120	na
Umatilla River	Metals	Nickel	FS	3	3	250	280	260	15
Umatilla River	Metals	Nickel	WB	1	1	400	400	400	na
Umatilla River	Metals	Selenium	FS	3	3	380	400	390	10
Umatilla River	Metals	Selenium	WB	1	1	410	410	410	na
Umatilla River	Metals	Silver	FS	3	0	100	100	50	0.00
Umatilla River	Metals	Silver	WB	1	0	100	100	50	na
Umatilla River	Metals	Thallium	FS	3	1	50	68	39	25
Umatilla River	Metals	Thallium	WB	1	0	50	50	25	na

Appendix D-2: Tributary Summary Statistics
Walleye

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
Umatilla River	Metals	Vanadium	WB	1	1	20	20	20	na
Umatilla River	Metals	Zinc	FS	3	3	8,500	9,000	8,700	280
Umatilla River	Metals	Zinc	WB	1	1	13,000	13,000	13,000	na
Umatilla River	PCBs	Aroclor 1016	FS	3	0	2.0	20	6.8	5.1
Umatilla River	PCBs	Aroclor 1016	WB	1	0	19	19	9.5	na
Umatilla River	PCBs	Aroclor 1221	FS	3	0	2.0	20	6.8	5.1
Umatilla River	PCBs	Aroclor 1221	WB	1	0	19	19	9.5	na
Umatilla River	PCBs	Aroclor 1232	FS	3	0	2.0	20	6.8	5.1
Umatilla River	PCBs	Aroclor 1232	WB	1	0	19	19	9.5	na
Umatilla River	PCBs	Aroclor 1242	FS	3	0	2.0	20	6.8	5.1
Umatilla River	PCBs	Aroclor 1242	WB	1	0	19	19	9.5	na
Umatilla River	PCBs	Aroclor 1248	FS	3	0	2.0	20	6.8	5.1
Umatilla River	PCBs	Aroclor 1248	WB	1	0	19	19	9.5	na
Umatilla River	PCBs	Aroclor 1254	FS	3	3	12	14	13	1.2
Umatilla River	PCBs	Aroclor 1254	WB	1	1	71	71	71	na
Umatilla River	PCBs	Aroclor 1260	FS	3	0	19	20	9.8	0.29
Umatilla River	PCBs	Aroclor 1260	WB	1	1	47	47	47	na
Umatilla River	PCBs	PCB 077	FS	3	0.012	0.012	0.014	0.014	0.0013
Umatilla River	PCBs	PCB 077	WB	1	1	0.074	0.074	0.074	na
Umatilla River	PCBs	PCB 105	FS	3	3	0.31	0.38	0.33	0.038
Umatilla River	PCBs	PCB 105	WB	1	1	1.2	1.2	1.2	na
Umatilla River	PCBs	PCB 114	FS	3	3	0.025	0.031	0.027	0.0032
Umatilla River	PCBs	PCB 114	WB	1	1	0.13	0.13	0.13	na
Umatilla River	PCBs	PCB 118	FS	3	3	0.62	0.74	0.66	0.067
Umatilla River	PCBs	PCB 118	WB	1	1	2.6	2.6	2.6	na
Umatilla River	PCBs	PCB 123	FS	3	3	0.012	0.016	0.014	0.0020
Umatilla River	PCBs	PCB 123	WB	1	1	0.051	0.051	0.051	na
Umatilla River	PCBs	PCB 126	FS	3	0	0.00067	0.00070	0.00035	0.000087
Umatilla River	PCBs	PCB 126	WB	1	0	0.0010	0.0010	0.00050	na
Umatilla River	PCBs	PCB 156	FS	3	3	0.11	0.15	0.12	0.023
Umatilla River	PCBs	PCB 156	WB	1	1	0.80	0.80	0.80	na
Umatilla River	PCBs	PCB 157	FS	3	0	0.00073	0.0014	0.00057	0.00018
Umatilla River	PCBs	PCB 157	WB	1	0	0.0017	0.0017	0.00084	na
Umatilla River	PCBs	PCB 167	FS	3	3	0.041	0.044	0.043	0.0017
Umatilla River	PCBs	PCB 167	WB	1	1	0.32	0.32	0.32	na
Umatilla River	PCBs	PCB 169	FS	3	0	0.00050	0.00075	0.00029	0.000072
Umatilla River	PCBs	PCB 169	WB	1	0	0.0049	0.0049	0.0025	na
Umatilla River	PCBs	PCB 170	FS	3	3	0.16	0.29	0.22	0.065
Umatilla River	PCBs	PCB 170	WB	1	1	0.97	0.97	0.97	na
Umatilla River	PCBs	PCB 180	FS	3	3	0.47	1.0	0.73	0.27
Umatilla River	PCBs	PCB 180	WB	1	1	2.8	2.8	2.8	na
Umatilla River	PCBs	PCB 189	FS	3	3	0.0064	0.0074	0.0068	0.00053
Umatilla River	PCBs	PCB 189	WB	1	1	0.053	0.053	0.053	na
Umatilla River	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.98	0.029
Umatilla River	Pesticides	Aldrin	WB	1	0	1.9	1.9	0.95	na
Umatilla River	Pesticides	Alpha-BHC	FS	3	0	2.4	2.5	1.2	0.029
Umatilla River	Pesticides	Alpha-BHC	WB	1	0	2.4	2.4	1.2	na
Umatilla River	Pesticides	Alpha-Chlordane	FS	3	0	2.4	2.5	1.2	0.029
Umatilla River	Pesticides	Alpha-Chlordane	WB	1	0	2.4	2.4	1.2	na
Umatilla River	Pesticides	Beta-BHC	FS	3	0	2.4	2.5	1.2	0.029
Umatilla River	Pesticides	Beta-BHC	WB	1	0	2.4	2.4	1.2	na
Umatilla River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	2.4	2.5	1.2	0.029
Umatilla River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	1	1	5.8	5.8	5.8	na
Umatilla River	Pesticides	cis-Nonachlor	FS	3	0	2.4	2.5	1.2	0.029
Umatilla River	Pesticides	cis-Nonachlor	WB	1	0	2.4	2.4	1.2	na
Umatilla River	Pesticides	DDD-o,p'	FS	3	0	2.4	2.5	1.2	0.029
Umatilla River	Pesticides	DDD-o,p'	WB	1	1	5.8	5.8	5.8	na
Umatilla River	Pesticides	DDE-o,p'	FS	3	0	2.4	2.8	1.3	0.10
Umatilla River	Pesticides	DDE-o,p'	WB	1	1	6.8	6.8	6.8	na
Umatilla River	Pesticides	DDT-o,p'	FS	3	0	2.4	2.5	1.2	0.029
Umatilla River	Pesticides	DDT-o,p'	WB	1	0	2.4	2.4	1.2	na
Umatilla River	Pesticides	DDD-p,p'	FS	3	3	6.3	7.1	6.7	0.40
Umatilla River	Pesticides	DDD-p,p'	WB	1	1	50	50	50	na
Umatilla River	Pesticides	DDE-p,p'	FS	3	3	44	52	47	4.4
Umatilla River	Pesticides	DDE-p,p'	WB	1	1	350	350	350	na
Umatilla River	Pesticides	DDT-p,p'	FS	3	2	2.0	2.7	2.0	0.73
Umatilla River	Pesticides	DDT-p,p'	WB	1	1	12	12	12	na
Umatilla River	Pesticides	Delta-BHC	FS	3	0	2.4	2.5	1.2	0.029
Umatilla River	Pesticides	Delta-BHC	WB	1	0	2.4	2.4	1.2	na
Umatilla River	Pesticides	Endosulfan Sulfate	FS	3	0	2.4	2.5	1.2	0.029
Umatilla River	Pesticides	Endosulfan Sulfate	WB	1	0	2.4	2.4	1.2	na
Umatilla River	Pesticides	Gamma-Chlordane	FS	3	0	2.4	2.5	1.2	0.029
Umatilla River	Pesticides	Gamma-Chlordane	WB	1	1	3.6	3.6	3.6	na
Umatilla River	Pesticides	Gamma-Chlordane	FS	3	0	2.4	2.5	1.2	0.029
Umatilla River	Pesticides	Gamma-Chlordane	WB	1	0	2.4	2.4	1.2	na

Appendix D-2: Tributary Summary Statistics
Walleye

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.98	0.029
Umatilla River	Pesticides	Heptachlor	WB	1	0	1.9	1.9	0.95	na
Umatilla River	Pesticides	Heptachlor Epoxide	FS	3	0	2.4	2.5	1.2	0.029
Umatilla River	Pesticides	Heptachlor Epoxide	WB	1	0	2.4	2.4	1.2	na
Umatilla River	Pesticides	Hexachlorobenzene	FS	3	0	2.4	2.5	1.2	0.029
Umatilla River	Pesticides	Hexachlorobenzene	WB	1	0	2.4	2.4	1.2	na
Umatilla River	Pesticides	Lindane	FS	3	0	2.4	2.5	1.2	0.029
Umatilla River	Pesticides	Lindane	WB	1	0	2.4	2.4	1.2	na
Umatilla River	Pesticides	Mirex	FS	3	0	2.4	2.5	1.2	0.029
Umatilla River	Pesticides	Mirex	WB	1	0	2.4	2.4	1.2	na
Umatilla River	Pesticides	Oxychlordan	FS	3	0	2.4	2.5	1.2	0.029
Umatilla River	Pesticides	Oxychlordan	WB	1	1	1.7	1.7	1.7	na
Umatilla River	Pesticides	Pentachloroanisol	FS	3	0	2.4	2.5	1.2	0.029
Umatilla River	Pesticides	Pentachloroanisol	WB	1	1	1.2	1.2	1.2	na
Umatilla River	Pesticides	Toxaphene	FS	3	0	73	74	37	0.29
Umatilla River	Pesticides	Toxaphene	WB	1	0	72	72	36	na
Umatilla River	Pesticides	trans-Nonachlor	FS	3	0	2.4	2.5	1.2	0.029
Umatilla River	Pesticides	trans-Nonachlor	WB	1	1	3.0	3.0	3.0	na
Umatilla River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	1,2,4-Trichlorobenzene	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	1,2-Diphenylhydrazine	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	10	19	6.7	2.5
Umatilla River	Semivolatiles	2,4-Dinitrotoluene	WB	1	0	10	10	5.1	na
Umatilla River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	21	38	13	5.0
Umatilla River	Semivolatiles	2,6-Dinitrotoluene	WB	1	0	20	20	10	na
Umatilla River	Semivolatiles	2-Chloronaphthalene	FS	3	0	10	19	6.7	2.5
Umatilla River	Semivolatiles	2-Chloronaphthalene	WB	1	0	10	10	5.1	na
Umatilla River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	4-Bromophenyl-Phenylether	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	Acenaphthene	FS	3	0	10	19	6.7	2.5
Umatilla River	Semivolatiles	Acenaphthene	WB	1	0	10	10	5.1	na
Umatilla River	Semivolatiles	Acenaphthylene	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	Acenaphthylene	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	Anthracene	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	Anthracene	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	Benzene, 1,2-dichloro-	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	Benzene, 1,3-dichloro-	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	Benzene, 1,4-dichloro-	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	Benzo(a)anthracene	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	Benzo(a)anthracene	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	Benzo(a)pyrene	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	Benzo(a)pyrene	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	10	19	6.7	2.5
Umatilla River	Semivolatiles	Benzo(g,h,i)perylene	WB	1	0	10	10	5.1	na
Umatilla River	Semivolatiles	Benzo[b]fluoranthene	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	Benzo[b]fluoranthene	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	Benzo[k]fluoranthene	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	10	19	6.7	2.5
Umatilla River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	1	0	10	10	5.1	na
Umatilla River	Semivolatiles	Chrysene	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	Chrysene	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	10	19	6.7	2.5
Umatilla River	Semivolatiles	Dibenz[a,h]anthracene	WB	1	0	10	10	5.1	na
Umatilla River	Semivolatiles	Dibenzofuran	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	Dibenzofuran	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	Fluoranthene	FS	3	0	10	19	6.7	2.5
Umatilla River	Semivolatiles	Fluoranthene	WB	1	0	10	10	5.1	na
Umatilla River	Semivolatiles	9H-Fluorene	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	9H-Fluorene	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	Hexachlorobutadiene	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	Hexachlorobutadiene	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	Hexachloroethane	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	Hexachloroethane	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	10	19	6.7	2.5
Umatilla River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	1	0	10	10	5.1	na
Umatilla River	Semivolatiles	Naphthalene	FS	3	0	5.3	13	4.7	1.9
Umatilla River	Semivolatiles	Naphthalene	WB	1	0	16	16	8.0	na
Umatilla River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	Naphthalene, 1-methyl-	WB	1	1	7.7	7.7	7.7	na

Appendix D-2: Tributary Summary Statistics
Walleye

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	2	6.0	9.6	6.1	1.4
Umatilla River	Semivolatiles	Naphthalene, 2-methyl-	WB	1	1	16	16	16	na
Umatilla River	Semivolatiles	Nitrobenzene	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	Nitrobenzene	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	Phenanthrene	FS	3	0	5.2	9.6	3.4	1.3
Umatilla River	Semivolatiles	Phenanthrene	WB	1	0	5.0	5.0	2.5	na
Umatilla River	Semivolatiles	Pyrene	FS	3	0	10	19	6.7	2.5
Umatilla River	Semivolatiles	Pyrene	WB	1	0	10	10	5.1	na
Umatilla River	Semivolatiles	Retene	FS	3	0	10	19	6.7	2.5
Umatilla River	Semivolatiles	Retene	WB	1	0	10	10	5.1	na

Appendix D-2: Tributary Summary Statistics
Rainbow Trout

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Deschutes River	Dioxin/furans	2,3,7,8-TCDD	FS	4	1	0.000010	0.000060	0.000025	0.000026
Deschutes River	Dioxin/furans	2,3,7,8-TCDD	WB	3	3	0.000060	0.000070	0.000067	0.0000058
Deschutes River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	4	3	0.000020	0.00019	0.00013	0.000081
Deschutes River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	2	0.000050	0.00022	0.00015	0.00011
Deschutes River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	4	3	0.000010	0.00013	0.000084	0.000054
Deschutes River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	2	0.00010	0.00012	0.000093	0.000038
Deschutes River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	4	3	0.000050	0.00021	0.00014	0.000080
Deschutes River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.00010	0.00026	0.00017	0.00011
Deschutes River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	4	4	0.000040	0.000070	0.000055	0.000013
Deschutes River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000070	0.00010	0.000073	0.000025
Deschutes River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	4	4	0.00019	0.00030	0.00024	0.000058
Deschutes River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00022	0.00032	0.00028	0.000055
Deschutes River	Dioxin/furans	OCDD	FS	4	3	0.000090	0.00069	0.00034	0.00027
Deschutes River	Dioxin/furans	OCDD	WB	3	3	0.00034	0.00052	0.00043	0.000090
Deschutes River	Dioxin/furans	2,3,7,8-TCDF	FS	4	4	0.00024	0.00028	0.00026	0.000017
Deschutes River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00033	0.00048	0.00041	0.000075
Deschutes River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	4	3	0.000010	0.000060	0.000036	0.000023
Deschutes River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.000060	0.000090	0.000077	0.000015
Deschutes River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	4	3	0.000010	0.000070	0.000049	0.000030
Deschutes River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	2	0.000050	0.00012	0.000082	0.000050
Deschutes River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	4	1	0.000010	0.000050	0.000014	0.000010
Deschutes River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	1	0.000010	0.00012	0.000035	0.000028
Deschutes River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	4	1	0.000010	0.000050	0.000019	0.000017
Deschutes River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	2	0.000040	0.00012	0.000050	0.000010
Deschutes River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	4	2	0.000010	0.000060	0.000038	0.000027
Deschutes River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	2	0.000080	0.00012	0.000077	0.000015
Deschutes River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	4	4	0.00014	0.00019	0.00015	0.000025
Deschutes River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	2	0.00012	0.00016	0.00012	0.000051
Deschutes River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	4	3	0.000070	0.00015	0.000084	0.000048
Deschutes River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000070	0.000090	0.000065	0.000018
Deschutes River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	4	0	0.000010	0.000070	0.000015	0.000014
Deschutes River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	1	0.000010	0.000090	0.000027	0.000020
Deschutes River	Dioxin/furans	OCDF	FS	4	3	0.000030	0.000060	0.000039	0.000015
Deschutes River	Dioxin/furans	OCDF	WB	3	2	0.000030	0.00010	0.000043	0.000012
Deschutes River	Guaiacols/Phenols	4-Chloroguaiacol	FS	4	0	480	510	240	6.3
Deschutes River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	490	500	250	2.9
Deschutes River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	4	0	480	510	240	6.3
Deschutes River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	490	500	250	2.9
Deschutes River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	4	0	480	510	240	6.3
Deschutes River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	490	500	250	2.9
Deschutes River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	4	0	480	510	240	6.3
Deschutes River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	490	500	250	2.9
Deschutes River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	4	0	480	510	240	6.3
Deschutes River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	490	500	250	2.9
Deschutes River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	4	0	190	200	97	2.5
Deschutes River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	200	200	99	1.2
Deschutes River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	4	0	480	510	240	6.3
Deschutes River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	490	500	250	2.9
Deschutes River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	4	0	190	200	97	2.5
Deschutes River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	200	200	99	1.2
Deschutes River	Guaiacols/Phenols	2-Chlorophenol	FS	4	0	190	200	97	2.5
Deschutes River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	200	200	99	1.2
Deschutes River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	4	0	190	200	97	2.5
Deschutes River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	200	200	99	1.2
Deschutes River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	4	0	190	200	97	2.5
Deschutes River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	200	200	99	1.2
Deschutes River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	4	0	480	510	240	6.3
Deschutes River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	490	500	250	2.9
Deschutes River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	4	0	190	200	97	2.5
Deschutes River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	2	0	200	200	100	0.00
Deschutes River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	4	0	190	200	97	2.5
Deschutes River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	200	200	99	1.2
Deschutes River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	4	0	190	200	97	2.5
Deschutes River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	2	0	200	200	100	0.00
Deschutes River	Guaiacols/Phenols	Pentachlorophenol	FS	4	0	190	200	97	2.5
Deschutes River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	200	200	99	1.2
Deschutes River	Guaiacols/Phenols	Phenol	FS	4	0	190	200	97	2.5
Deschutes River	Guaiacols/Phenols	Phenol	WB	3	0	200	300	120	29
Deschutes River	Metals	Aluminum	FS	4	3	1,000	5,000	1,500	690
Deschutes River	Metals	Aluminum	WB	3	1	5,000	20,000	6,600	3,800
Deschutes River	Metals	Antimony	FS	4	0	50	50	25	0.00
Deschutes River	Metals	Antimony	WB	3	0	50	50	25	0.00
Deschutes River	Metals	Arsenic	FS	4	0	50	50	25	0.00
Deschutes River	Metals	Arsenic	WB	3	0	50	50	25	0.00
Deschutes River	Metals	Barium	FS	4	4	290	720	560	200
Deschutes River	Metals	Barium	WB	3	3	320	830	560	250

Appendix D-2: Tributary Summary Statistics
Rainbow Trout

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Deschutes River	Metals	Beryllium	FS	4	2	4.0	9.0	5.4	3.4
Deschutes River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Deschutes River	Metals	Cadmium	FS	4	1	4.0	5.0	2.8	1.5
Deschutes River	Metals	Cadmium	WB	3	1	4.0	4.6	2.9	1.5
Deschutes River	Metals	Chromium	FS	4	2	100	120	85	40
Deschutes River	Metals	Chromium	WB	3	2	100	110	87	32
Deschutes River	Metals	Cobalt	FS	4	4	30	37	34	3.1
Deschutes River	Metals	Cobalt	WB	3	3	56	94	73	19
Deschutes River	Metals	Copper	FS	4	4	450	610	520	65
Deschutes River	Metals	Copper	WB	3	3	1,100	1,400	1,200	140
Deschutes River	Metals	Lead	FS	4	0	10	10	5.0	0.00
Deschutes River	Metals	Lead	WB	3	2	10	16	10	5.5
Deschutes River	Metals	Manganese	FS	4	4	370	440	410	33
Deschutes River	Metals	Manganese	WB	3	3	1,500	2,200	1,800	370
Deschutes River	Metals	Mercury	FS	4	4	45	150	82	45
Deschutes River	Metals	Mercury	WB	3	1	44	380	140	210
Deschutes River	Metals	Nickel	FS	4	4	42	64	54	9.6
Deschutes River	Metals	Nickel	WB	3	3	62	91	79	15
Deschutes River	Metals	Selenium	FS	4	4	180	240	210	28
Deschutes River	Metals	Selenium	WB	3	3	350	400	380	29
Deschutes River	Metals	Silver	FS	4	0	100	200	88	25
Deschutes River	Metals	Silver	WB	3	0	100	100	50	0.00
Deschutes River	Metals	Thallium	FS	4	0	50	50	25	0.00
Deschutes River	Metals	Thallium	WB	3	0	50	50	25	0.00
Deschutes River	Metals	Vanadium	FS	4	3	20	26	21	7.5
Deschutes River	Metals	Vanadium	WB	3	3	70	100	81	18
Deschutes River	Metals	Zinc	FS	4	4	13,000	19,000	15,000	2,900
Deschutes River	Metals	Zinc	WB	3	3	32,000	39,000	36,000	3,700
Deschutes River	PCBs	Aroclor 1016	FS	4	0	18	19	9.3	0.29
Deschutes River	PCBs	Aroclor 1016	WB	3	0	18	19	9.2	0.29
Deschutes River	PCBs	Aroclor 1221	FS	4	0	18	19	9.3	0.29
Deschutes River	PCBs	Aroclor 1221	WB	3	0	18	19	9.2	0.29
Deschutes River	PCBs	Aroclor 1232	FS	4	0	18	19	9.3	0.29
Deschutes River	PCBs	Aroclor 1232	WB	3	0	18	19	9.2	0.29
Deschutes River	PCBs	Aroclor 1242	FS	4	0	18	19	9.3	0.29
Deschutes River	PCBs	Aroclor 1242	WB	3	0	18	19	9.2	0.29
Deschutes River	PCBs	Aroclor 1248	FS	4	0	18	19	9.3	0.29
Deschutes River	PCBs	Aroclor 1248	WB	3	0	18	19	9.2	0.29
Deschutes River	PCBs	Aroclor 1254	FS	4	4	9.9	20	15	4.2
Deschutes River	PCBs	Aroclor 1254	WB	3	2	17	30	19	11
Deschutes River	PCBs	Aroclor 1260	FS	4	0	18	19	9.3	0.29
Deschutes River	PCBs	Aroclor 1260	WB	3	0	18	19	9.2	0.29
Deschutes River	PCBs	PCB 077	FS	4	4	0.012	0.016	0.014	0.0017
Deschutes River	PCBs	PCB 077	WB	3	3	0.016	0.020	0.019	0.0021
Deschutes River	PCBs	PCB 105	FS	4	4	0.45	0.65	0.54	0.088
Deschutes River	PCBs	PCB 105	WB	3	3	0.74	0.79	0.77	0.027
Deschutes River	PCBs	PCB 114	FS	4	4	0.035	0.050	0.041	0.0066
Deschutes River	PCBs	PCB 114	WB	3	3	0.055	0.061	0.058	0.0028
Deschutes River	PCBs	PCB 118	FS	4	4	1.0	1.4	1.1	0.16
Deschutes River	PCBs	PCB 118	WB	3	3	1.6	1.7	1.7	0.075
Deschutes River	PCBs	PCB 123	FS	4	4	0.016	0.020	0.018	0.0016
Deschutes River	PCBs	PCB 123	WB	3	3	0.015	0.029	0.023	0.0071
Deschutes River	PCBs	PCB 126	FS	4	4	0.0032	0.0048	0.0042	0.00067
Deschutes River	PCBs	PCB 126	WB	3	3	0.0052	0.0062	0.0058	0.00056
Deschutes River	PCBs	PCB 156	FS	4	4	0.15	0.22	0.18	0.027
Deschutes River	PCBs	PCB 156	WB	3	3	0.25	0.26	0.26	0.0033
Deschutes River	PCBs	PCB 157	FS	4	4	0.027	0.039	0.032	0.0051
Deschutes River	PCBs	PCB 157	WB	3	3	0.043	0.047	0.046	0.0021
Deschutes River	PCBs	PCB 167	FS	4	4	0.062	0.089	0.074	0.011
Deschutes River	PCBs	PCB 167	WB	3	3	0.10	0.10	0.10	0.0013
Deschutes River	PCBs	PCB 169	FS	4	0	0.00065	0.0011	0.00047	0.000099
Deschutes River	PCBs	PCB 169	WB	3	0	0.00088	0.0010	0.00047	0.000038
Deschutes River	PCBs	PCB 170	FS	4	4	0.16	0.21	0.17	0.023
Deschutes River	PCBs	PCB 170	WB	3	3	0.24	0.25	0.24	0.0057
Deschutes River	PCBs	PCB 180	FS	4	4	0.43	0.59	0.49	0.072
Deschutes River	PCBs	PCB 180	WB	3	3	0.66	0.69	0.68	0.015
Deschutes River	PCBs	PCB 189	FS	4	2	0.0070	0.0098	0.0058	0.0017
Deschutes River	PCBs	PCB 189	WB	3	3	0.011	0.011	0.011	0.000092
Deschutes River	Pesticides	Aldrin	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	Aldrin	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	Alpha-BHC	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	Alpha-BHC	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	Alpha-Chlordene	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	Alpha-Chlordene	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	Beta-BHC	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	Beta-BHC	WB	3	0	1.8	1.9	0.92	0.029

Appendix D-2: Tributary Summary Statistics
Rainbow Trout

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Deschutes River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	cis-Nonachlor	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	cis-Nonachlor	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	DDD-o,p'	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	DDD-o,p'	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	DDE-o,p'	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	DDE-o,p'	WB	3	2	1.6	1.9	1.4	0.41
Deschutes River	Pesticides	DDT-o,p'	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	DDT-o,p'	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	DDD-p,p'	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	DDD-p,p'	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	DDE-p,p'	FS	4	4	4.1	6.5	5.1	1.2
Deschutes River	Pesticides	DDE-p,p'	WB	3	3	10	12	11	1.0
Deschutes River	Pesticides	DDT-p,p'	FS	4	3	1.9	3.7	2.6	1.2
Deschutes River	Pesticides	DDT-p,p'	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	DDMU	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	DDMU	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	Delta-BHC	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	Delta-BHC	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	Endosulfan Sulfate	FS	4	0	1.9	1.9	0.95	na
Deschutes River	Pesticides	Endosulfan Sulfate	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	Gamma-Chlordane	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	Gamma-Chlordane	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	Gamma-Chlordene	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	Gamma-Chlordene	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	Heptachlor	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	Heptachlor	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	Heptachlor Epoxide	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	Heptachlor Epoxide	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	Hexachlorobenzene	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	Hexachlorobenzene	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	Lindane	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	Lindane	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	Mirex	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	Mirex	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	Oxychlordane	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	Oxychlordane	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	Pentachloroanisol	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	Pentachloroanisol	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Pesticides	Toxaphene	FS	4	0	55	57	28	0.48
Deschutes River	Pesticides	Toxaphene	WB	3	0	53	58	28	1.3
Deschutes River	Pesticides	trans-Nonachlor	FS	4	0	1.8	1.9	0.93	0.029
Deschutes River	Pesticides	trans-Nonachlor	WB	3	0	1.8	1.9	0.92	0.029
Deschutes River	Semivolatiles	1,2,4-Trichlorobenzene	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	4.9	5.0	2.5	0.029
Deschutes River	Semivolatiles	1,2-Diphenylhydrazine	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	4.9	5.0	2.5	0.029
Deschutes River	Semivolatiles	2,4-Dinitrotoluene	FS	4	0	9.6	10	4.9	0.13
Deschutes River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	9.8	10	5.0	0.058
Deschutes River	Semivolatiles	2,6-Dinitrotoluene	FS	4	0	19	20	9.7	0.25
Deschutes River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	20	20	9.9	0.12
Deschutes River	Semivolatiles	2-Chloronaphthalene	FS	4	0	9.6	10	4.9	0.13
Deschutes River	Semivolatiles	2-Chloronaphthalene	WB	3	0	4.9	10	4.2	1.5
Deschutes River	Semivolatiles	4-Bromophenyl-Phenylether	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	4.9	5.0	2.5	0.029
Deschutes River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	4.9	5.0	2.5	0.029
Deschutes River	Semivolatiles	Acenaphthene	FS	4	0	9.6	10	4.9	0.13
Deschutes River	Semivolatiles	Acenaphthene	WB	3	0	9.8	10	5.0	0.058
Deschutes River	Semivolatiles	Acenaphthylene	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	Acenaphthylene	WB	3	0	4.9	5.0	2.5	0.029
Deschutes River	Semivolatiles	Anthracene	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	Anthracene	WB	3	0	4.9	5.0	2.5	0.029
Deschutes River	Semivolatiles	Benzene, 1,2-dichloro-	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	4.9	5.0	2.5	0.029
Deschutes River	Semivolatiles	Benzene, 1,3-dichloro-	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	4.9	5.0	2.5	0.029
Deschutes River	Semivolatiles	Benzene, 1,4-dichloro-	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	4.9	5.0	2.5	0.029
Deschutes River	Semivolatiles	Benzo(a)anthracene	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	Benzo(a)anthracene	WB	3	0	4.9	5.0	2.5	0.029
Deschutes River	Semivolatiles	Benzo(a)pyrene	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	Benzo(a)pyrene	WB	3	0	25	98	25	21
Deschutes River	Semivolatiles	Benzo(g,h,i)perylene	FS	4	0	9.6	10	4.9	0.13
Deschutes River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	50	200	49	42

Appendix D-2: Tributary Summary Statistics
Rainbow Trout

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Deschutes River	Semivolatiles	Benzo[b]Fluoranthene	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	25	200	41	49
Deschutes River	Semivolatiles	Benzo[k]fluoranthene	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	25	200	41	49
Deschutes River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	4	0	9.6	10	4.9	0.13
Deschutes River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	9.8	10	5.0	0.058
Deschutes River	Semivolatiles	Chrysene	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	Chrysene	WB	3	0	4.9	5.0	2.5	0.029
Deschutes River	Semivolatiles	Dibenz[a,h]anthracene	FS	4	0	9.6	10	4.9	0.13
Deschutes River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	50	200	49	42
Deschutes River	Semivolatiles	Dibenzofuran	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	Dibenzofuran	WB	3	0	4.9	5.0	2.5	0.029
Deschutes River	Semivolatiles	Fluoranthene	FS	4	0	9.6	10	4.9	0.13
Deschutes River	Semivolatiles	Fluoranthene	WB	3	0	9.8	10	5.0	0.058
Deschutes River	Semivolatiles	9H-Fluorene	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	9H-Fluorene	WB	3	0	4.9	5.0	2.5	0.029
Deschutes River	Semivolatiles	Hexachlorobutadiene	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	Hexachlorobutadiene	WB	3	0	4.9	5.0	2.5	0.029
Deschutes River	Semivolatiles	Hexachloroethane	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	Hexachloroethane	WB	3	0	4.9	5.0	2.5	0.029
Deschutes River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	4	0	9.6	10	4.9	0.13
Deschutes River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	50	200	49	42
Deschutes River	Semivolatiles	Naphthalene	FS	4	0	17	24	10	1.5
Deschutes River	Semivolatiles	Naphthalene	WB	3	0	23	33	13	2.7
Deschutes River	Semivolatiles	Naphthalene, 1-methyl-	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	4.9	5.0	2.5	0.029
Deschutes River	Semivolatiles	Naphthalene, 2-methyl-	FS	4	0	4.8	10	3.1	1.4
Deschutes River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	1	5.9	8.4	4.6	1.2
Deschutes River	Semivolatiles	Nitrobenzene	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	Nitrobenzene	WB	3	0	4.9	5.0	2.5	0.029
Deschutes River	Semivolatiles	Phenanthrene	FS	4	0	4.8	5.1	2.4	0.075
Deschutes River	Semivolatiles	Phenanthrene	WB	3	0	5.0	5.9	2.7	0.26
Deschutes River	Semivolatiles	Pyrene	FS	4	0	9.6	10	4.9	0.13
Deschutes River	Semivolatiles	Pyrene	WB	3	0	9.8	10	5.0	0.058
Deschutes River	Semivolatiles	Retene	FS	4	0	9.6	10	4.9	0.13
Deschutes River	Semivolatiles	Retene	WB	3	1	10	13	7.8	4.8
Klickitat River	Dioxin/furans	2,3,7,8-TCDD	WB	2	1	0.000020	0.00010	0.000055	0.000064
Klickitat River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	2	0	0.000040	0.000050	0.000023	0.000035
Klickitat River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	2	0	0.000020	0.000030	0.000013	0.000035
Klickitat River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	2	1	0.000020	0.000070	0.000040	0.000042
Klickitat River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	2	1	0.000030	0.000050	0.000033	0.000025
Klickitat River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	2	1	0.000020	0.00016	0.000085	0.00011
Klickitat River	Dioxin/furans	OCDD	WB	2	2	0.00071	0.0030	0.0018	0.0016
Klickitat River	Dioxin/furans	2,3,7,8-TCDF	WB	2	1	0.000040	0.00028	0.00015	0.00018
Klickitat River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	2	0	0.000030	0.000030	0.000015	0.00
Klickitat River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	2	0	0.000030	0.000030	0.000015	0.00
Klickitat River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	2	0	0.000010	0.000030	0.000010	0.0000071
Klickitat River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	2	0	0.000010	0.000030	0.000010	0.0000071
Klickitat River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	2	0	0.000010	0.000030	0.000010	0.0000071
Klickitat River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	2	0	0.000010	0.000030	0.000010	0.0000071
Klickitat River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	2	0	0.000020	0.000030	0.000013	0.0000035
Klickitat River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	2	0	0.000020	0.000030	0.000013	0.0000035
Klickitat River	Dioxin/furans	OCDF	WB	2	0	0.000060	0.000060	0.000030	0.00
Klickitat River	Guaiacols/Phenols	4-Chloroguaiacol	WB	2	0	800	980	450	65
Klickitat River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	2	0	800	980	450	65
Klickitat River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	2	0	800	980	450	65
Klickitat River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	2	0	800	980	450	65
Klickitat River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	2	0	800	980	450	65
Klickitat River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	2	0	320	390	180	26
Klickitat River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	2	0	800	980	450	65
Klickitat River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	2	0	320	390	180	26
Klickitat River	Guaiacols/Phenols	2-Chlorophenol	WB	2	0	320	390	180	26
Klickitat River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	2	0	320	390	180	26
Klickitat River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	2	0	320	390	180	26
Klickitat River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	2	0	800	980	450	65
Klickitat River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	2	0	320	390	180	26
Klickitat River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	2	0	320	390	180	26
Klickitat River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	2	0	320	390	180	26
Klickitat River	Guaiacols/Phenols	Pentachlorophenol	WB	2	0	320	390	180	26
Klickitat River	Guaiacols/Phenols	Phenol	WB	2	0	320	390	180	26
Klickitat River	Metals	Aluminum	WB	2	2	10,000	10,000	10,000	71
Klickitat River	Metals	Antimony	WB	2	0	50	50	25	0.00
Klickitat River	Metals	Arsenic	WB	2	2	410	560	490	110
Klickitat River	Metals	Barium	WB	2	2	220	420	320	140
Klickitat River	Metals	Beryllium	WB	2	0	4.0	4.0	2.0	0.00
Klickitat River	Metals	Cadmium	WB	2	2	7.1	13	10	4.2

Appendix D-2: Tributary Summary Statistics
Rainbow Trout

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Klickitat River	Metals	Chromium	WB	2	1	100	110	80	42
Klickitat River	Metals	Cobalt	WB	2	2	65	83	74	13
Klickitat River	Metals	Copper	WB	2	2	1,500	2,100	1,800	430
Klickitat River	Metals	Lead	WB	2	2	14	16	15	1.4
Klickitat River	Metals	Manganese	WB	2	2	1,700	2,600	2,100	670
Klickitat River	Metals	Mercury	WB	2	2	60	98	79	27
Klickitat River	Metals	Nickel	WB	2	2	64	290	180	160
Klickitat River	Metals	Selenium	WB	2	2	400	790	600	280
Klickitat River	Metals	Silver	WB	2	0	100	100	50	0.00
Klickitat River	Metals	Thallium	WB	2	0	50	50	25	0.00
Klickitat River	Metals	Vanadium	WB	2	2	49	88	69	28
Klickitat River	Metals	Zinc	WB	2	2	23,000	32,000	27,000	6,600
Klickitat River	PCBs	Aroclor 1016	WB	2	0	19	20	9.8	0.35
Klickitat River	PCBs	Aroclor 1221	WB	2	0	19	20	9.8	0.35
Klickitat River	PCBs	Aroclor 1232	WB	2	0	19	20	9.8	0.35
Klickitat River	PCBs	Aroclor 1242	WB	2	0	19	20	9.8	0.35
Klickitat River	PCBs	Aroclor 1248	WB	2	0	19	20	9.8	0.35
Klickitat River	PCBs	Aroclor 1254	WB	2	2	6.9	17	12	7.1
Klickitat River	PCBs	Aroclor 1260	WB	2	0	19	20	9.8	0.35
Klickitat River	PCBs	PCB 077	WB	2	2	0.0036	0.013	0.0082	0.0066
Klickitat River	PCBs	PCB 105	WB	2	2	0.079	0.21	0.14	0.090
Klickitat River	PCBs	PCB 114	WB	2	2	0.0066	0.016	0.011	0.0064
Klickitat River	PCBs	PCB 118	WB	2	2	0.15	0.45	0.30	0.21
Klickitat River	PCBs	PCB 123	WB	2	2	0.0027	0.0090	0.0059	0.0045
Klickitat River	PCBs	PCB 126	WB	2	1	0.00050	0.0027	0.0015	0.0017
Klickitat River	PCBs	PCB 156	WB	2	2	0.016	0.060	0.038	0.031
Klickitat River	PCBs	PCB 157	WB	2	2	0.0047	0.017	0.011	0.0086
Klickitat River	PCBs	PCB 167	WB	2	2	0.012	0.039	0.026	0.019
Klickitat River	PCBs	PCB 169	WB	2	0	0.0010	0.0010	0.00050	0.00
Klickitat River	PCBs	PCB 170	WB	2	2	0.049	0.19	0.12	0.099
Klickitat River	PCBs	PCB 180	WB	2	2	0.17	0.56	0.36	0.28
Klickitat River	PCBs	PCB 189	WB	2	2	0.0025	0.0075	0.0050	0.0035
Klickitat River	Pesticides	Aldrin	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	Alpha-BHC	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	Alpha-Chlordane	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	Beta-BHC	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	cis-Nonachlor	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	DDD-o,p'	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	DDE-o,p'	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	DDT-o,p'	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	DDD-p,p'	WB	2	1	1.8	2.0	1.4	0.57
Klickitat River	Pesticides	DDE-p,p'	WB	2	2	2.9	11	7.0	5.7
Klickitat River	Pesticides	DDT-p,p'	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	DDMU	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	Delta-BHC	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	Endosulfan Sulfate	WB	2	0	0.00	0.00	0.00	na
Klickitat River	Pesticides	Gamma-Chlordane	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	Gamma-Chlordene	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	Heptachlor	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	Heptachlor Epoxide	WB	2	0	0.00	0.00	0.00	na
Klickitat River	Pesticides	Hexachlorobenzene	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	Lindane	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	Mirex	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	Oxychlordane	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	Pentachloroanisol	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Pesticides	Toxaphene	WB	2	0	58	60	30	0.71
Klickitat River	Pesticides	trans-Nonachlor	WB	2	0	1.9	2.0	0.98	0.035
Klickitat River	Semivolatiles	1,2,4-Trichlorobenzene	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	1,2-Diphenylhydrazine	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	2,4-Dinitrotoluene	WB	2	0	16	20	8.9	1.3
Klickitat River	Semivolatiles	2,6-Dinitrotoluene	WB	2	0	32	39	18	2.6
Klickitat River	Semivolatiles	2-Chloronaphthalene	WB	2	0	16	20	8.9	1.3
Klickitat River	Semivolatiles	4-Bromophenyl-Phenylether	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	Acenaphthene	WB	2	0	16	20	8.9	1.3
Klickitat River	Semivolatiles	Acenaphthylene	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	Anthracene	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	Benzene, 1,2-dichloro-	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	Benzene, 1,3-dichloro-	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	Benzene, 1,4-dichloro-	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	Benzo(a)anthracene	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	Benzo(a)pyrene	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	Benzo(g,h,i)perylene	WB	2	0	16	20	8.9	1.3
Klickitat River	Semivolatiles	Benzo[b]fluoranthene	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	Benzo[k]fluoranthene	WB	2	0	8.0	9.8	4.5	0.64

Appendix D-2: Tributary Summary Statistics
Rainbow Trout

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Klickitat River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	2	0	16	20	8.9	1.3
Klickitat River	Semivolatiles	Chrysene	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	Dibenz[a,h]anthracene	WB	2	0	16	20	8.9	1.3
Klickitat River	Semivolatiles	Dibenzofuran	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	Fluoranthene	WB	2	0	16	20	8.9	1.3
Klickitat River	Semivolatiles	9H-Fluorene	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	Hexachlorobutadiene	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	Hexachloroethane	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	2	0	16	20	8.9	1.3
Klickitat River	Semivolatiles	Naphthalene	WB	2	0	19	30	12	3.9
Klickitat River	Semivolatiles	Naphthalene, 1-methyl-	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	Naphthalene, 2-methyl-	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	Nitrobenzene	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	Phenanthrene	WB	2	0	8.0	9.8	4.5	0.64
Klickitat River	Semivolatiles	Pyrene	WB	2	0	16	20	8.9	1.3
Klickitat River	Semivolatiles	Retene	WB	2	0	16	20	8.9	1.3
Umatilla River	Dioxin/furans	2,3,7,8-TCDD	WB	4	2	0.000010	0.000070	0.000035	0.000035
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	4	4	0.00014	0.00017	0.00015	0.000015
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	4	4	0.00010	0.00013	0.00011	0.000014
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	4	4	0.000070	0.00013	0.00010	0.000029
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	4	4	0.000040	0.000060	0.000048	0.0000096
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	4	4	0.00015	0.00027	0.00020	0.000053
Umatilla River	Dioxin/furans	OCDD	WB	4	4	0.00018	0.00043	0.00029	0.00012
Umatilla River	Dioxin/furans	2,3,7,8-TCDF	WB	4	4	0.000060	0.00014	0.000095	0.000041
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	4	4	0.000040	0.000050	0.000045	0.0000058
Umatilla River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	4	4	0.000040	0.000050	0.000045	0.0000058
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	4	2	0.000010	0.000030	0.000015	0.000012
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	4	4	0.000030	0.000040	0.000035	0.0000058
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	4	3	0.000010	0.000070	0.000049	0.000030
Umatilla River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	4	4	0.00013	0.00016	0.00014	0.000014
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	4	3	0.000010	0.000080	0.000056	0.000034
Umatilla River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	4	3	0.000010	0.000040	0.000021	0.000014
Umatilla River	Dioxin/furans	OCDF	WB	4	3	0.000010	0.000060	0.000029	0.000023
Umatilla River	Guaiacols/Phenols	4-Chloroguaiacol	WB	4	0	500	1,200	330	160
Umatilla River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	4	0	500	1,200	330	160
Umatilla River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	4	0	500	1,200	330	160
Umatilla River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	4	0	500	1,200	330	160
Umatilla River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	4	0	500	1,200	330	160
Umatilla River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	4	0	200	460	130	66
Umatilla River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	4	0	500	1,200	330	160
Umatilla River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	4	0	200	460	130	66
Umatilla River	Guaiacols/Phenols	2-Chlorophenol	WB	4	0	200	460	130	66
Umatilla River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	4	0	200	460	130	66
Umatilla River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	4	0	200	460	130	66
Umatilla River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	4	0	500	1,200	330	160
Umatilla River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	4	0	200	460	130	66
Umatilla River	Guaiacols/Phenols	Pentachlorophenol	WB	4	0	200	460	130	66
Umatilla River	Guaiacols/Phenols	Phenol	WB	4	0	200	460	130	66
Umatilla River	Metals	Aluminum	WB	4	4	2,300	150,000	64,000	69,000
Umatilla River	Metals	Antimony	WB	4	0	50	50	25	0.00
Umatilla River	Metals	Arsenic	WB	4	3	50	130	79	49
Umatilla River	Metals	Barium	WB	4	4	950	4,000	2,300	1,400
Umatilla River	Metals	Beryllium	WB	4	1	4.0	11	5.8	3.8
Umatilla River	Metals	Cadmium	WB	4	3	4.0	58	25	26
Umatilla River	Metals	Chromium	WB	4	4	100	160	120	28
Umatilla River	Metals	Cobalt	WB	4	4	53	210	130	79
Umatilla River	Metals	Copper	WB	4	4	900	5,000	2,900	1,700
Umatilla River	Metals	Lead	WB	4	4	11	88	42	35
Umatilla River	Metals	Manganese	WB	4	4	1,100	9,700	4,500	4,100
Umatilla River	Metals	Mercury	WB	4	4	33	42	37	3.8
Umatilla River	Metals	Nickel	WB	4	4	130	1,100	660	400
Umatilla River	Metals	Selenium	WB	4	4	230	310	260	37
Umatilla River	Metals	Silver	WB	4	0	100	100	50	0.00
Umatilla River	Metals	Thallium	WB	4	0	50	50	25	0.00
Umatilla River	Metals	Vanadium	WB	4	4	73	770	400	360
Umatilla River	Metals	Zinc	WB	4	4	24,000	29,000	27,000	2,600
Umatilla River	PCBs	Aroclor 1016	WB	4	0	18	20	9.6	0.48
Umatilla River	PCBs	Aroclor 1221	WB	4	0	18	20	9.6	0.48
Umatilla River	PCBs	Aroclor 1232	WB	4	0	18	20	9.6	0.48
Umatilla River	PCBs	Aroclor 1242	WB	4	0	18	20	9.6	0.48
Umatilla River	PCBs	Aroclor 1248	WB	4	0	18	20	9.6	0.48
Umatilla River	PCBs	Aroclor 1254	WB	4	0	18	20	9.6	0.48
Umatilla River	PCBs	Aroclor 1260	WB	4	1	6.0	20	8.9	1.9
Umatilla River	PCBs	PCB 077	WB	4	4	0.0022	0.0075	0.0048	0.0030
Umatilla River	PCBs	PCB 105	WB	4	4	0.034	0.21	0.12	0.098
Umatilla River	PCBs	PCB 114	WB	4	3	0.00028	0.021	0.011	0.010

Appendix D-2: Tributary Summary Statistics
Rainbow Trout

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	PCBs	PCB 118	WB	4	4	0.063	0.48	0.27	0.24
Umatilla River	PCBs	PCB 123	WB	4	4	0.0018	0.011	0.0055	0.0044
Umatilla River	PCBs	PCB 126	WB	4	3	0.00048	0.0062	0.0023	0.0027
Umatilla River	PCBs	PCB 156	WB	4	4	0.012	0.080	0.045	0.038
Umatilla River	PCBs	PCB 157	WB	4	0	0.00050	0.0010	0.00034	0.00012
Umatilla River	PCBs	PCB 167	WB	4	4	0.0066	0.040	0.024	0.019
Umatilla River	PCBs	PCB 169	WB	4	0	0.00050	0.0012	0.00033	0.00017
Umatilla River	PCBs	PCB 170	WB	4	4	0.027	0.22	0.12	0.10
Umatilla River	PCBs	PCB 180	WB	4	4	0.11	0.75	0.40	0.33
Umatilla River	PCBs	PCB 189	WB	4	2	0.00050	0.0069	0.0022	0.0032
Umatilla River	Pesticides	Aldrin	WB	4	0	1.8	2.5	1.0	0.16
Umatilla River	Pesticides	Alpha-BHC	WB	4	0	1.8	2.5	1.1	0.16
Umatilla River	Pesticides	Alpha-Chlordene	WB	4	0	1.8	2.5	1.1	0.16
Umatilla River	Pesticides	Beta-BHC	WB	4	0	1.8	2.5	1.1	0.16
Umatilla River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	4	0	1.8	2.5	1.1	0.16
Umatilla River	Pesticides	cis-Nonachlor	WB	4	0	1.8	2.5	1.1	0.16
Umatilla River	Pesticides	DDD-o,p'	WB	4	0	1.8	2.5	1.1	0.16
Umatilla River	Pesticides	DDE-o,p'	WB	4	1	1.8	4.3	1.9	1.6
Umatilla River	Pesticides	DDT-o,p'	WB	4	0	1.8	2.5	1.1	0.16
Umatilla River	Pesticides	DDD-p,p'	WB	4	1	1.2	2.5	1.2	0.025
Umatilla River	Pesticides	DDE-p,p'	WB	4	4	15	18	17	1.3
Umatilla River	Pesticides	DDT-p,p'	WB	4	1	1.8	2.5	1.4	0.56
Umatilla River	Pesticides	DDMU	WB	2	0	1.8	2.5	1.1	0.25
Umatilla River	Pesticides	Delta-BHC	WB	4	0	1.8	2.5	1.1	0.16
Umatilla River	Pesticides	Endosulfan Sulfate	WB	4	0	1.8	2.5	1.1	0.16
Umatilla River	Pesticides	Gamma-Chlordane	WB	4	0	1.8	2.5	1.1	0.16
Umatilla River	Pesticides	Gamma-Chlordene	WB	4	0	1.8	2.5	1.1	0.16
Umatilla River	Pesticides	Heptachlor	WB	4	0	1.8	2.5	1.0	0.16
Umatilla River	Pesticides	Heptachlor Epoxide	WB	4	0	1.8	2.5	1.1	0.16
Umatilla River	Pesticides	Hexachlorobenzene	WB	4	0	1.8	2.5	1.1	0.16
Umatilla River	Pesticides	Lindane	WB	4	0	1.8	2.5	1.1	0.16
Umatilla River	Pesticides	Mirex	WB	4	0	1.8	2.5	1.1	0.16
Umatilla River	Pesticides	Oxychlordane	WB	4	0	2.4	18	3.2	3.9
Umatilla River	Pesticides	Pentachloroanisol	WB	4	0	1.8	2.5	1.1	0.16
Umatilla River	Pesticides	Toxaphene	WB	3	0	54	73	33	5.2
Umatilla River	Pesticides	trans-Nonachlor	WB	4	0	1.8	2.5	1.1	0.16
Umatilla River	Semivolatiles	1,2,4-Trichlorobenzene	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	1,2-Diphenylhydrazine	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	2,4-Dinitrotoluene	WB	4	0	9.9	23	6.6	3.3
Umatilla River	Semivolatiles	2,6-Dinitrotoluene	WB	4	0	20	46	13	6.6
Umatilla River	Semivolatiles	2-Chloronaphthalene	WB	4	0	9.9	23	6.6	3.3
Umatilla River	Semivolatiles	4-Bromophenyl-Phenylether	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	Acenaphthene	WB	4	0	9.9	23	6.6	3.3
Umatilla River	Semivolatiles	Acenaphthylene	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	Anthracene	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	Benzene, 1,2-dichloro-	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	Benzene, 1,3-dichloro-	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	Benzene, 1,4-dichloro-	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	Benzo(a)anthracene	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	Benzo(a)pyrene	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	Benzo(g,h,i)perylene	WB	4	0	9.9	23	6.6	3.3
Umatilla River	Semivolatiles	Benzo[k]fluoranthene	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	Benzo[k]fluoranthene	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	4	0	9.9	23	6.6	3.3
Umatilla River	Semivolatiles	Chrysene	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	Dibenz[a,h]anthracene	WB	4	0	9.9	23	6.6	3.3
Umatilla River	Semivolatiles	Dibenzofuran	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	Fluoranthene	WB	4	0	9.9	23	6.6	3.3
Umatilla River	Semivolatiles	9H-Fluorene	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	Hexachlorobutadiene	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	Hexachloroethane	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	4	0	9.9	23	6.6	3.3
Umatilla River	Semivolatiles	Naphthalene	WB	4	0	5.1	12	4.9	1.6
Umatilla River	Semivolatiles	Naphthalene, 1-methyl-	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	Naphthalene, 2-methyl-	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	Nitrobenzene	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	Phenanthrene	WB	4	0	5.0	12	3.3	1.6
Umatilla River	Semivolatiles	Pyrene	WB	4	0	9.9	23	6.6	3.3
Umatilla River	Semivolatiles	Retene	WB	4	0	9.9	23	6.6	3.3
Yakima River	Dioxin/furans	2,3,7,8-TCDD	FS	3	3	0.000090	0.00015	0.00012	0.000031
Yakima River	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.00014	0.00020	0.00017	0.000031
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000010	0.00033	0.00018	0.00016
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.00021	0.00026	0.00023	0.000026
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	3	0.00011	0.00027	0.00017	0.000090
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.00012	0.00014	0.00013	0.000010

Appendix D-2: Tributary Summary Statistics
Rainbow Trout

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	2	0.000020	0.00012	0.000077	0.000059
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	0	0.000010	0.00021	0.00013	0.00011
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000010	0.00032	0.00012	0.00017
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	0	0.000010	0.000060	0.000038	0.000029
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.00016	0.00044	0.00026	0.00015
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	0	0.00024	0.00028	0.00026	0.000021
Yakima River	Dioxin/furans	OCDD	FS	3	3	0.00019	0.0014	0.00060	0.00069
Yakima River	Dioxin/furans	OCDD	WB	3	0	0.00036	0.00048	0.00041	0.000064
Yakima River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00014	0.00017	0.00015	0.000015
Yakima River	Dioxin/furans	2,3,7,8-TCDF	WB	3	0	0.00024	0.00036	0.00029	0.000062
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.000040	0.00018	0.000087	0.000081
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	0	0.000010	0.000080	0.000045	0.000038
Yakima River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	2	0.000020	0.000050	0.000033	0.000021
Yakima River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	0	0.000070	0.00010	0.000083	0.000015
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	3	0.000020	0.00018	0.000073	0.000092
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	0	0.000010	0.000040	0.000025	0.000018
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	2	0.000010	0.00021	0.000085	0.00011
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	0	0.000040	0.000060	0.000047	0.000012
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	2	0.000010	0.00038	0.00016	0.00020
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000070	0.000090	0.000080	0.000010
Yakima River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	3	0.00015	0.00036	0.00022	0.00012
Yakima River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	0	0.00016	0.00021	0.00018	0.000029
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	3	0.000080	0.00035	0.00017	0.00015
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000030	0.000080	0.000058	0.000038
Yakima River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	1	0.000020	0.00034	0.00012	0.00019
Yakima River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
Yakima River	Dioxin/furans	OCDF	FS	3	3	0.000050	0.00091	0.00035	0.00049
Yakima River	Dioxin/furans	OCDF	WB	3	0	0.000010	0.000070	0.000027	0.000038
Yakima River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	400	480	220	21
Yakima River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	420	530	240	31
Yakima River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	400	480	220	21
Yakima River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	420	530	240	31
Yakima River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	400	480	220	21
Yakima River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	420	530	240	31
Yakima River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	400	480	220	21
Yakima River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	420	530	240	31
Yakima River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	400	480	220	21
Yakima River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	420	530	240	31
Yakima River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	160	190	89	8.3
Yakima River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	170	210	97	12
Yakima River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	400	480	220	21
Yakima River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	420	530	240	31
Yakima River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	160	190	89	8.3
Yakima River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	170	210	97	12
Yakima River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	160	190	89	8.3
Yakima River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	170	210	97	12
Yakima River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	160	190	89	8.3
Yakima River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	170	210	97	12
Yakima River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	160	190	89	8.3
Yakima River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	170	210	97	12
Yakima River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	400	480	220	21
Yakima River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	420	530	240	31
Yakima River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	160	190	89	8.3
Yakima River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	170	210	97	12
Yakima River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	160	190	89	8.3
Yakima River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	170	210	97	12
Yakima River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	160	190	89	8.3
Yakima River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	170	210	97	12
Yakima River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	160	190	89	8.3
Yakima River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	170	210	97	12
Yakima River	Guaiacols/Phenols	Phenol	FS	3	0	160	190	89	8.3
Yakima River	Guaiacols/Phenols	Phenol	WB	3	0	170	210	97	12
Yakima River	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
Yakima River	Metals	Aluminum	WB	3	0	4,400	14,000	9,000	4,700
Yakima River	Metals	Antimony	FS	3	0	50	50	25	0.00
Yakima River	Metals	Antimony	WB	3	0	50	50	25	0.00
Yakima River	Metals	Arsenic	FS	3	0	50	50	25	0.00
Yakima River	Metals	Arsenic	WB	3	0	50	50	25	0.00
Yakima River	Metals	Barium	FS	3	1	200	260	150	92
Yakima River	Metals	Barium	WB	3	0	620	1,100	830	240
Yakima River	Metals	Beryllium	FS	3	2	4.0	6.7	4.6	2.4
Yakima River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Yakima River	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
Yakima River	Metals	Cadmium	WB	3	0	4.0	4.6	2.9	1.5
Yakima River	Metals	Chromium	FS	3	0	100	100	50	0.00
Yakima River	Metals	Chromium	WB	3	0	100	120	73	40

Appendix D-2: Tributary Summary Statistics
Rainbow Trout

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Metals	Cobalt	FS	3	3	15	23	19	4.0
Yakima River	Metals	Cobalt	WB	3	0	48	72	60	12
Yakima River	Metals	Copper	FS	3	3	440	510	480	35
Yakima River	Metals	Copper	WB	3	0	980	1,200	1,100	110
Yakima River	Metals	Lead	FS	3	0	10	10	5.0	0.00
Yakima River	Metals	Lead	WB	3	0	10	60	26	30
Yakima River	Metals	Manganese	FS	3	3	410	600	520	97
Yakima River	Metals	Manganese	WB	3	0	3,200	4,100	3,600	500
Yakima River	Metals	Mercury	FS	3	3	67	74	69	4.0
Yakima River	Metals	Mercury	WB	3	0	42	61	46	22
Yakima River	Metals	Nickel	FS	3	3	61	76	67	7.9
Yakima River	Metals	Nickel	WB	3	0	150	340	230	97
Yakima River	Metals	Selenium	FS	3	3	220	250	240	15
Yakima River	Metals	Selenium	WB	3	0	300	340	320	20
Yakima River	Metals	Silver	FS	3	0	100	100	50	0.00
Yakima River	Metals	Silver	WB	3	0	100	100	50	0.00
Yakima River	Metals	Thallium	FS	3	0	50	50	25	0.00
Yakima River	Metals	Thallium	WB	3	0	50	50	25	0.00
Yakima River	Metals	Vanadium	FS	3	2	10	17	13	6.7
Yakima River	Metals	Vanadium	WB	3	0	52	140	84	49
Yakima River	Metals	Zinc	FS	3	3	8,300	8,900	8,500	310
Yakima River	Metals	Zinc	WB	3	0	23,000	27,000	25,000	1,900
Yakima River	PCBs	Aroclor 1016	FS	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1016	WB	3	0	19	22	10	0.76
Yakima River	PCBs	Aroclor 1221	FS	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1221	WB	3	0	19	22	10	0.76
Yakima River	PCBs	Aroclor 1232	FS	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1232	WB	3	0	19	22	10	0.76
Yakima River	PCBs	Aroclor 1242	FS	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1242	WB	3	0	19	22	10	0.76
Yakima River	PCBs	Aroclor 1248	FS	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1248	WB	3	0	19	22	10	0.76
Yakima River	PCBs	Aroclor 1254	FS	3	3	10	14	12	2.1
Yakima River	PCBs	Aroclor 1254	WB	3	0	12	17	14	2.5
Yakima River	PCBs	Aroclor 1260	FS	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1260	WB	3	0	19	22	10	0.76
Yakima River	PCBs	PCB 077	FS	3	3	0.0091	0.010	0.0095	0.00047
Yakima River	PCBs	PCB 077	WB	3	0	0.014	0.021	0.017	0.0032
Yakima River	PCBs	PCB 105	FS	3	3	0.40	0.46	0.43	0.031
Yakima River	PCBs	PCB 105	WB	3	0	0.56	0.65	0.60	0.049
Yakima River	PCBs	PCB 114	FS	3	3	0.032	0.036	0.034	0.0018
Yakima River	PCBs	PCB 114	WB	3	0	0.046	0.055	0.050	0.0048
Yakima River	PCBs	PCB 118	FS	3	3	0.89	1.0	0.94	0.068
Yakima River	PCBs	PCB 118	WB	3	0	1.3	1.5	1.3	0.12
Yakima River	PCBs	PCB 123	FS	3	3	0.015	0.016	0.016	0.00020
Yakima River	PCBs	PCB 123	WB	3	0	0.021	0.024	0.022	0.0017
Yakima River	PCBs	PCB 126	FS	3	3	0.0021	0.0023	0.0022	0.000070
Yakima River	PCBs	PCB 126	WB	3	0	0.0031	0.0032	0.0031	0.000084
Yakima River	PCBs	PCB 156	FS	3	3	0.18	0.20	0.19	0.010
Yakima River	PCBs	PCB 156	WB	3	0	0.26	0.29	0.27	0.014
Yakima River	PCBs	PCB 157	FS	3	3	0.037	0.042	0.039	0.0026
Yakima River	PCBs	PCB 157	WB	3	0	0.053	0.058	0.055	0.0026
Yakima River	PCBs	PCB 167	FS	3	3	0.069	0.079	0.073	0.0049
Yakima River	PCBs	PCB 167	WB	3	0	0.10	0.11	0.11	0.0059
Yakima River	PCBs	PCB 169	FS	3	0	0.00063	0.00072	0.00034	0.000023
Yakima River	PCBs	PCB 169	WB	3	0	0.00050	0.00093	0.00036	0.00011
Yakima River	PCBs	PCB 170	FS	3	3	0.19	0.22	0.21	0.015
Yakima River	PCBs	PCB 170	WB	3	0	0.27	0.29	0.28	0.0095
Yakima River	PCBs	PCB 180	FS	3	3	0.55	0.64	0.59	0.043
Yakima River	PCBs	PCB 180	WB	3	0	0.78	0.85	0.81	0.034
Yakima River	PCBs	PCB 189	FS	3	3	0.0075	0.0086	0.0080	0.00058
Yakima River	PCBs	PCB 189	WB	3	0	0.011	0.012	0.011	0.000058
Yakima River	Pesticides	Aldrin	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	Aldrin	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Pesticides	Alpha-BHC	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	Alpha-BHC	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Pesticides	Alpha-Chlordane	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	Alpha-Chlordane	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Pesticides	Beta-BHC	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	Beta-BHC	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Pesticides	cis-Nonachlor	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	cis-Nonachlor	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Pesticides	DDD-o,p'	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	DDD-o,p'	WB	3	0	2.4	5.4	1.7	0.84

Appendix D-2: Tributary Summary Statistics
Rainbow Trout

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Pesticides	DDE-o,p'	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	DDE-o,p'	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Pesticides	DDT-o,p'	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	DDT-o,p'	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Pesticides	DDD-p,p'	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	DDD-p,p'	WB	3	0	1.7	5.4	2.1	0.53
Yakima River	Pesticides	DDE-p,p'	FS	3	3	38	54	45	8.3
Yakima River	Pesticides	DDE-p,p'	WB	3	0	73	84	78	5.7
Yakima River	Pesticides	DDT-p,p'	FS	3	3	2.9	5.1	3.8	1.2
Yakima River	Pesticides	DDT-p,p'	WB	3	0	9.7	12	11	1.3
Yakima River	Pesticides	DDMU	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	DDMU	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Pesticides	Delta-BHC	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	Delta-BHC	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Pesticides	Endosulfan Sulfate	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	Endosulfan Sulfate	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Pesticides	Gamma-Chlordane	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	Gamma-Chlordane	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Pesticides	Gamma-Chlordene	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	Gamma-Chlordene	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Pesticides	Heptachlor	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	Heptachlor	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Pesticides	Heptachlor Epoxide	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	Heptachlor Epoxide	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Pesticides	Hexachlorobenzene	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	Hexachlorobenzene	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Pesticides	Lindane	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	Lindane	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Pesticides	Mirex	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	Mirex	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Pesticides	Oxychlordane	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	Oxychlordane	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Pesticides	Pentachloroanisol	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	Pentachloroanisol	WB	3	0	0.80	5.4	1.5	1.1
Yakima River	Pesticides	Toxaphene	FS	3	0	57	57	29	0.00
Yakima River	Pesticides	Toxaphene	WB	3	0	57	66	31	2.3
Yakima River	Pesticides	trans-Nonachlor	FS	3	0	2.4	2.4	1.2	2.1E-08
Yakima River	Pesticides	trans-Nonachlor	WB	3	0	2.4	5.4	1.7	0.84
Yakima River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	7.9	9.5	4.4	0.42
Yakima River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	41	53	24	3.1
Yakima River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	16	19	8.9	0.83
Yakima River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	83	110	49	6.3
Yakima River	Semivolatiles	2-Chloronaphthalene	FS	3	0	7.9	9.5	4.4	0.42
Yakima River	Semivolatiles	2-Chloronaphthalene	WB	3	0	41	53	24	3.1
Yakima River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	Acenaphthene	FS	3	0	7.9	9.5	4.4	0.42
Yakima River	Semivolatiles	Acenaphthene	WB	3	0	41	53	24	3.1
Yakima River	Semivolatiles	Acenaphthylene	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	Acenaphthylene	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	Anthracene	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	Anthracene	WB	3	0	5.5	27	11	4.4
Yakima River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	Benzo(a)anthracene	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	Benzo(a)anthracene	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	Benzo(a)pyrene	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	Benzo(a)pyrene	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	7.9	9.5	4.4	0.42
Yakima River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	41	53	24	3.1
Yakima River	Semivolatiles	Benzo[b]fluoranthene	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	Benzo[b]fluoranthene	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	7.9	9.5	4.4	0.42
Yakima River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	41	53	24	3.1

Appendix D-2: Tributary Summary Statistics
Rainbow Trout

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Semivolatiles	Chrysene	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	Chrysene	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	7.9	9.5	4.4	0.42
Yakima River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	41	53	24	3.1
Yakima River	Semivolatiles	Dibenzofuran	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	Dibenzofuran	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	Fluoranthene	FS	3	0	7.9	9.5	4.4	0.42
Yakima River	Semivolatiles	Fluoranthene	WB	3	0	34	53	29	4.8
Yakima River	Semivolatiles	9H-Fluorene	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	9H-Fluorene	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	Hexachlorobutadiene	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	Hexachlorobutadiene	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	Hexachloroethane	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	Hexachloroethane	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	7.9	9.5	4.4	0.42
Yakima River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	41	53	24	3.1
Yakima River	Semivolatiles	Naphthalene	FS	3	0	5.9	14	4.4	2.1
Yakima River	Semivolatiles	Naphthalene	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	4.1	4.8	2.2	0.18
Yakima River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	3	6.8	11	8.4	2.4
Yakima River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	Nitrobenzene	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	Nitrobenzene	WB	3	0	21	27	12	1.6
Yakima River	Semivolatiles	Phenanthrene	FS	3	0	4.0	4.8	2.2	0.20
Yakima River	Semivolatiles	Phenanthrene	WB	3	0	26	50	25	21
Yakima River	Semivolatiles	Pyrene	FS	3	0	7.9	9.5	4.4	0.42
Yakima River	Semivolatiles	Pyrene	WB	3	0	51	450	170	240
Yakima River	Semivolatiles	Retene	FS	3	0	7.9	9.5	4.4	0.42
Yakima River	Semivolatiles	Retene	WB	3	0	41	53	24	3.1

Appendix D-2: Tributary Summary Statistics
Channel Catfish

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Dioxin/furans	2,3,7,8-TCDD	FS	2	2	0.0010	0.0014	0.0012	0.00029
Columbia River	Dioxin/furans	2,3,7,8-TCDD	WB	3	3	0.00066	0.0011	0.00087	0.00022
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	2	2	0.00049	0.00057	0.00053	0.000057
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.00037	0.00055	0.00047	0.000092
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	2	2	0.00014	0.00030	0.00022	0.00011
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	3	0.00020	0.00022	0.00021	0.000012
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	2	2	0.00059	0.0011	0.00082	0.00033
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	3	0.00070	0.00085	0.00077	0.000076
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	2	2	0.00014	0.00017	0.00016	0.000021
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	3	0.00012	0.00014	0.00013	0.000010
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	2	2	0.00047	0.0012	0.00086	0.00054
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00059	0.00073	0.00065	0.000074
Columbia River	Dioxin/furans	OCDD	FS	2	2	0.00037	0.0013	0.00081	0.00062
Columbia River	Dioxin/furans	OCDD	WB	3	3	0.00057	0.00086	0.00074	0.00015
Columbia River	Dioxin/furans	2,3,7,8-TCDF	FS	2	2	0.0022	0.0034	0.0028	0.00085
Columbia River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.0018	0.0031	0.0025	0.00064
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	2	2	0.00021	0.00031	0.00026	0.000071
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.00014	0.00029	0.00020	0.000078
Columbia River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	2	2	0.00052	0.00066	0.00059	0.000099
Columbia River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00033	0.00055	0.00045	0.00011
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	2	1	0.000020	0.000090	0.000050	0.000057
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	3	0.000030	0.000080	0.000050	0.000026
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	2	2	0.000030	0.000050	0.000040	0.000014
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	1	0.000010	0.000060	0.000025	0.000030
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	2	0	0.000020	0.000020	0.000010	0.00
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
Columbia River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	2	2	0.000050	0.000050	0.000050	0.00
Columbia River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	2	0.000010	0.000060	0.000042	0.000032
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	2	0	0.000020	0.000050	0.000018	0.000011
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
Columbia River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	2	0	0.000020	0.000050	0.000018	0.000011
Columbia River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
Columbia River	Dioxin/furans	OCDF	FS	2	2	0.000030	0.000090	0.000060	0.000042
Columbia River	Dioxin/furans	OCDF	WB	3	2	0.000010	0.000040	0.000020	0.000017
Columbia River	Guaiacols/Phenols	4-Chloroguaiacol	FS	2	0	910	930	460	7.4
Columbia River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	950	980	480	9.5
Columbia River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	2	0	910	930	460	7.4
Columbia River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	950	980	480	9.5
Columbia River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	2	0	910	930	460	7.4
Columbia River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	950	980	480	9.5
Columbia River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	2	0	910	930	460	7.4
Columbia River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	950	980	480	9.5
Columbia River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	2	0	910	930	460	7.4
Columbia River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	950	980	480	9.5
Columbia River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	2	0	370	370	180	2.8
Columbia River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	380	390	190	3.8
Columbia River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	2	0	910	930	460	7.4
Columbia River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	950	980	480	9.5
Columbia River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	2	0	370	370	180	2.8
Columbia River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	380	390	190	3.8
Columbia River	Guaiacols/Phenols	2-Chlorophenol	FS	2	0	370	370	180	2.8
Columbia River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	380	390	190	3.8
Columbia River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	2	0	370	370	180	2.8
Columbia River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	380	390	190	3.8
Columbia River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	2	0	370	370	180	2.8
Columbia River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	380	390	190	3.8
Columbia River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	2	0	910	930	460	7.4
Columbia River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	950	980	480	9.5
Columbia River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	2	0	370	370	180	2.8
Columbia River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	380	390	190	3.8
Columbia River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	2	0	370	370	180	2.8
Columbia River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	380	390	190	3.8
Columbia River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	2	0	370	370	180	2.8
Columbia River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	380	390	190	3.8
Columbia River	Guaiacols/Phenols	Pentachlorophenol	FS	2	0	370	370	180	2.8
Columbia River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	380	390	190	3.8
Columbia River	Guaiacols/Phenols	Phenol	FS	2	0	370	370	180	2.8
Columbia River	Guaiacols/Phenols	Phenol	WB	3	0	380	390	190	3.8
Columbia River	Metals	Aluminum	FS	2	1	1,000	42,000	21,000	29,000
Columbia River	Metals	Aluminum	WB	3	3	1,700	9,000	4,300	4,100
Columbia River	Metals	Antimony	FS	2	0	50	50	25	0.00
Columbia River	Metals	Antimony	WB	3	0	50	50	25	0.00
Columbia River	Metals	Arsenic	FS	2	1	50	330	180	220
Columbia River	Metals	Arsenic	WB	3	3	270	430	330	90
Columbia River	Metals	Barium	FS	2	1	200	280	190	130
Columbia River	Metals	Barium	WB	3	3	490	590	550	52

Appendix D-2: Tributary Summary Statistics
Channel Catfish

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Metals	Beryllium	FS	2	0	4.0	4.0	2.0	0.00
Columbia River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Columbia River	Metals	Cadmium	FS	2	0	4.0	4.0	2.0	0.00
Columbia River	Metals	Cadmium	WB	3	3	13	14	14	0.58
Columbia River	Metals	Chromium	FS	2	2	110	130	120	14
Columbia River	Metals	Chromium	WB	3	3	210	250	230	20
Columbia River	Metals	Cobalt	FS	2	2	78	99	89	15
Columbia River	Metals	Cobalt	WB	3	3	120	190	160	39
Columbia River	Metals	Copper	FS	2	2	350	360	360	7.1
Columbia River	Metals	Copper	WB	3	3	410	590	510	91
Columbia River	Metals	Lead	FS	2	1	10	11	8.0	4.2
Columbia River	Metals	Lead	WB	3	3	12	20	16	4.0
Columbia River	Metals	Manganese	FS	2	2	130	140	140	4.2
Columbia River	Metals	Manganese	WB	3	3	1,200	1,800	1,600	310
Columbia River	Metals	Mercury	FS	2	2	240	240	240	4.2
Columbia River	Metals	Mercury	WB	3	3	180	320	230	74
Columbia River	Metals	Nickel	FS	2	0	30	30	15	0.00
Columbia River	Metals	Nickel	WB	3	3	90	95	92	2.5
Columbia River	Metals	Selenium	FS	2	0	500	500	250	0.00
Columbia River	Metals	Selenium	WB	3	3	510	630	580	58
Columbia River	Metals	Silver	FS	2	0	100	100	50	0.00
Columbia River	Metals	Silver	WB	3	0	100	100	50	0.00
Columbia River	Metals	Thallium	FS	2	0	50	50	25	0.00
Columbia River	Metals	Thallium	WB	3	0	50	50	25	0.00
Columbia River	Metals	Vanadium	FS	2	0	10	10	5.0	0.00
Columbia River	Metals	Vanadium	WB	3	3	48	92	72	22
Columbia River	Metals	Zinc	FS	2	2	7,800	9,900	8,800	1,500
Columbia River	Metals	Zinc	WB	3	3	17,000	19,000	18,000	1,100
Columbia River	PCBs	Aroclor 1016	FS	2	0	19	20	9.8	0.35
Columbia River	PCBs	Aroclor 1016	WB	3	0	16	20	8.8	1.0
Columbia River	PCBs	Aroclor 1221	FS	2	0	19	20	9.8	0.35
Columbia River	PCBs	Aroclor 1221	WB	3	0	16	20	8.8	1.0
Columbia River	PCBs	Aroclor 1232	FS	2	0	19	20	9.8	0.35
Columbia River	PCBs	Aroclor 1232	WB	3	0	16	20	8.8	1.0
Columbia River	PCBs	Aroclor 1242	FS	2	0	19	20	9.8	0.35
Columbia River	PCBs	Aroclor 1242	WB	3	0	16	20	8.8	1.0
Columbia River	PCBs	Aroclor 1248	FS	2	0	19	20	9.8	0.35
Columbia River	PCBs	Aroclor 1248	WB	3	0	16	20	8.8	1.0
Columbia River	PCBs	Aroclor 1254	FS	2	2	36	63	50	19
Columbia River	PCBs	Aroclor 1254	WB	3	3	25	41	33	8.0
Columbia River	PCBs	Aroclor 1260	FS	2	2	37	88	63	36
Columbia River	PCBs	Aroclor 1260	WB	3	3	32	77	52	23
Columbia River	PCBs	PCB 77	FS	2	2	0.036	0.037	0.036	0.00064
Columbia River	PCBs	PCB 77	WB	3	3	0.022	0.037	0.029	0.0075
Columbia River	PCBs	PCB 105	FS	2	2	2.0	3.9	3.0	1.3
Columbia River	PCBs	PCB 105	WB	3	3	1.3	3.3	2.3	0.97
Columbia River	PCBs	PCB 114	FS	2	2	0.19	0.42	0.31	0.16
Columbia River	PCBs	PCB 114	WB	3	3	0.12	0.33	0.23	0.10
Columbia River	PCBs	PCB 118	FS	2	2	4.6	9.1	6.8	3.2
Columbia River	PCBs	PCB 118	WB	3	3	2.9	7.1	4.9	2.1
Columbia River	PCBs	PCB 123	FS	2	2	0.092	0.18	0.14	0.064
Columbia River	PCBs	PCB 123	WB	3	3	0.059	0.15	0.11	0.046
Columbia River	PCBs	PCB 126	FS	2	1	0.0017	0.014	0.0073	0.0091
Columbia River	PCBs	PCB 126	WB	3	2	0.0017	0.030	0.013	0.015
Columbia River	PCBs	PCB 156	FS	2	2	0.91	1.9	1.4	0.70
Columbia River	PCBs	PCB 156	WB	3	3	0.52	1.5	1.0	0.50
Columbia River	PCBs	PCB 157	FS	2	2	0.17	0.36	0.26	0.14
Columbia River	PCBs	PCB 157	WB	3	3	0.099	0.28	0.19	0.091
Columbia River	PCBs	PCB 167	FS	2	2	0.35	0.75	0.55	0.29
Columbia River	PCBs	PCB 167	WB	3	3	0.22	0.56	0.40	0.17
Columbia River	PCBs	PCB 169	FS	2	0	0.0018	0.0026	0.0011	0.00028
Columbia River	PCBs	PCB 169	WB	3	0	0.0018	0.0027	0.0011	0.00022
Columbia River	PCBs	PCB 170	FS	2	2	1.7	3.9	2.8	1.6
Columbia River	PCBs	PCB 170	WB	3	3	1.00	3.0	2.0	0.98
Columbia River	PCBs	PCB 180	FS	2	2	4.3	10	7.3	4.3
Columbia River	PCBs	PCB 180	WB	3	3	3.2	9.2	6.2	3.0
Columbia River	PCBs	PCB 189	FS	2	2	0.058	0.13	0.096	0.054
Columbia River	PCBs	PCB 189	WB	3	3	0.033	0.10	0.067	0.034
Columbia River	Pesticides	Aldrin	FS	2	0	1.9	2.0	0.98	0.035
Columbia River	Pesticides	Aldrin	WB	3	0	1.6	2.0	0.88	0.10
Columbia River	Pesticides	Alpha-BHC	FS	2	0	1.9	2.0	0.98	0.035
Columbia River	Pesticides	Alpha-BHC	WB	3	0	1.6	2.0	0.88	0.10
Columbia River	Pesticides	Alpha-Chlordene	FS	2	0	1.9	2.0	0.98	0.035
Columbia River	Pesticides	Alpha-Chlordene	WB	3	0	1.6	2.0	0.88	0.10
Columbia River	Pesticides	Beta-BHC	FS	2	0	1.9	2.0	0.98	0.035
Columbia River	Pesticides	Beta-BHC	WB	3	0	1.6	2.0	0.88	0.10

Appendix D-2: Tributary Summary Statistics
Channel Catfish

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	2	1	2.0	3.2	2.1	1.6
Columbia River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	1	0.94	2.0	0.91	0.10
Columbia River	Pesticides	cis-Nonachlor	FS	2	2	2.0	5.2	3.6	2.3
Columbia River	Pesticides	cis-Nonachlor	WB	3	3	1.3	3.2	2.5	1.0
Columbia River	Pesticides	DDD-o,p'	FS	2	2	6.4	9.4	7.9	2.1
Columbia River	Pesticides	DDD-o,p'	WB	3	3	5.2	7.6	6.4	1.2
Columbia River	Pesticides	DDE-o,p'	FS	2	1	2.0	9.6	5.3	6.1
Columbia River	Pesticides	DDE-o,p'	WB	3	3	3.8	8.1	6.1	2.2
Columbia River	Pesticides	DDT-o,p'	FS	2	0	1.9	2.0	0.98	0.035
Columbia River	Pesticides	DDT-o,p'	WB	3	0	1.6	2.0	0.88	0.10
Columbia River	Pesticides	DDD-p,p'	FS	2	2	42	68	55	18
Columbia River	Pesticides	DDD-p,p'	WB	3	3	37	66	51	15
Columbia River	Pesticides	DDE-p,p'	FS	2	2	330	520	430	130
Columbia River	Pesticides	DDE-p,p'	WB	3	3	280	530	410	130
Columbia River	Pesticides	DDT-p,p'	FS	2	1	1.9	7.4	4.7	3.9
Columbia River	Pesticides	DDT-p,p'	WB	3	3	0.82	3.2	1.9	1.2
Columbia River	Pesticides	DDMU	FS	2	2	6.5	11	8.8	3.2
Columbia River	Pesticides	DDMU	WB	3	3	5.3	10	7.7	2.4
Columbia River	Pesticides	Delta-BHC	FS	2	0	1.9	2.0	0.98	0.035
Columbia River	Pesticides	Delta-BHC	WB	3	0	1.6	2.0	0.88	0.10
Columbia River	Pesticides	Endosulfan Sulfate	FS	2	0	1.9	2.0	0.98	0.035
Columbia River	Pesticides	Endosulfan Sulfate	WB	3	0	1.6	2.0	0.88	0.10
Columbia River	Pesticides	Gamma-Chlordane	FS	2	2	2.1	3.6	2.9	1.1
Columbia River	Pesticides	Gamma-Chlordane	WB	3	3	1.5	2.9	2.2	0.70
Columbia River	Pesticides	gamma-Chlordene	FS	2	0	1.9	2.0	0.98	0.035
Columbia River	Pesticides	gamma-Chlordene	WB	3	0	1.6	2.0	0.88	0.10
Columbia River	Pesticides	Heptachlor	FS	2	0	1.9	2.0	0.98	0.035
Columbia River	Pesticides	Heptachlor	WB	3	0	1.6	2.0	0.88	0.10
Columbia River	Pesticides	Heptachlor Epoxide	FS	2	0	1.9	2.0	0.98	0.035
Columbia River	Pesticides	Heptachlor Epoxide	WB	3	0	1.6	2.0	0.88	0.10
Columbia River	Pesticides	Hexachlorobenzene	FS	2	2	4.5	5.9	5.2	0.99
Columbia River	Pesticides	Hexachlorobenzene	WB	3	3	4.1	5.9	5.1	0.92
Columbia River	Pesticides	Lindane	FS	2	0	1.9	2.0	0.98	0.035
Columbia River	Pesticides	Lindane	WB	3	0	1.6	2.0	0.88	0.10
Columbia River	Pesticides	Mirex	FS	2	2	2.8	5.9	4.4	2.2
Columbia River	Pesticides	Mirex	WB	3	3	2.8	7.6	5.6	2.5
Columbia River	Pesticides	Oxychlordane	FS	2	2	1.5	2.6	2.1	0.78
Columbia River	Pesticides	Oxychlordane	WB	3	2	1.6	2.7	1.9	0.97
Columbia River	Pesticides	Pentachloroanisol	FS	2	0	1.9	2.0	0.98	0.035
Columbia River	Pesticides	Pentachloroanisol	WB	3	0	1.6	2.0	0.88	0.10
Columbia River	Pesticides	Toxaphene	FS	2	0	58	59	29	0.35
Columbia River	Pesticides	Toxaphene	WB	3	0	49	60	27	2.9
Columbia River	Pesticides	trans-Nonachlor	FS	2	2	5.3	11	8.2	4.0
Columbia River	Pesticides	trans-Nonachlor	WB	3	3	4.3	8.7	6.5	2.2
Columbia River	Semivolatiles	1,2,4-Trichlorobenzene	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	9.4	9.8	4.8	0.10
Columbia River	Semivolatiles	1,2-Diphenylhydrazine	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	9.4	9.8	4.8	0.10
Columbia River	Semivolatiles	2,4-Dinitrotoluene	FS	2	0	18	19	9.2	0.14
Columbia River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	19	20	9.6	0.21
Columbia River	Semivolatiles	2,6-Dinitrotoluene	FS	2	0	36	37	18	0.28
Columbia River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	38	39	19	0.42
Columbia River	Semivolatiles	2-Chloronaphthalene	FS	2	0	18	19	9.2	0.14
Columbia River	Semivolatiles	2-Chloronaphthalene	WB	3	0	19	20	9.6	0.21
Columbia River	Semivolatiles	4-Bromophenyl-Phenylether	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	9.4	9.8	4.8	0.10
Columbia River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	9.4	9.8	4.8	0.10
Columbia River	Semivolatiles	Acenaphthene	FS	2	0	18	19	9.2	0.14
Columbia River	Semivolatiles	Acenaphthene	WB	3	0	19	20	9.6	0.21
Columbia River	Semivolatiles	Acenaphthylene	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	Acenaphthylene	WB	3	0	9.4	9.8	4.8	0.10
Columbia River	Semivolatiles	Anthracene	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	Anthracene	WB	3	0	9.4	9.8	4.8	0.10
Columbia River	Semivolatiles	Benzene, 1,2-dichloro-	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	9.4	9.8	4.8	0.10
Columbia River	Semivolatiles	Benzene, 1,3-dichloro-	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	9.4	9.8	4.8	0.10
Columbia River	Semivolatiles	Benzene, 1,4-dichloro-	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	9.4	9.8	4.8	0.10
Columbia River	Semivolatiles	Benzo(a)anthracene	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	Benzo(a)anthracene	WB	3	0	9.4	9.8	4.8	0.10
Columbia River	Semivolatiles	Benzo(a)pyrene	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	Benzo(a)pyrene	WB	3	0	9.4	49	11	11
Columbia River	Semivolatiles	Benzo(g,h,i)perylene	FS	2	0	18	19	9.2	0.14
Columbia River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	1	15	98	25	21

Appendix D-2: Tributary Summary Statistics
Channel Catfish

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Semivolatiles	Benzo[b]Fluoranthene	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	9.4	49	11	11
Columbia River	Semivolatiles	Benzo[k]fluoranthene	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	9.4	49	11	11
Columbia River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	2	0	18	19	9.2	0.14
Columbia River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	19	20	9.6	0.21
Columbia River	Semivolatiles	Chrysene	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	Chrysene	WB	3	0	9.4	9.8	4.8	0.10
Columbia River	Semivolatiles	Dibenz[a,h]anthracene	FS	2	0	18	19	9.2	0.14
Columbia River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	19	98	23	23
Columbia River	Semivolatiles	Dibenzofuran	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	Dibenzofuran	WB	3	0	9.4	9.8	4.8	0.10
Columbia River	Semivolatiles	Fluoranthene	FS	2	0	18	19	9.2	0.14
Columbia River	Semivolatiles	Fluoranthene	WB	3	0	19	20	9.6	0.21
Columbia River	Semivolatiles	9H-Fluorene	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	9H-Fluorene	WB	3	0	9.4	9.8	4.8	0.10
Columbia River	Semivolatiles	Hexachlorobutadiene	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	Hexachlorobutadiene	WB	3	0	9.4	9.8	4.8	0.10
Columbia River	Semivolatiles	Hexachloroethane	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	Hexachloroethane	WB	3	0	9.4	9.8	4.8	0.10
Columbia River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	2	0	18	19	9.2	0.14
Columbia River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	19	98	23	23
Columbia River	Semivolatiles	Naphthalene	FS	2	0	24	27	13	1.2
Columbia River	Semivolatiles	Naphthalene	WB	3	0	20	24	11	1.3
Columbia River	Semivolatiles	Naphthalene, 1-methyl-	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	9.4	9.8	4.8	0.10
Columbia River	Semivolatiles	Naphthalene, 2-methyl-	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	9.4	9.8	4.8	0.10
Columbia River	Semivolatiles	Nitrobenzene	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	Nitrobenzene	WB	3	0	9.4	9.8	4.8	0.10
Columbia River	Semivolatiles	Phenanthrene	FS	2	0	9.1	9.3	4.6	0.071
Columbia River	Semivolatiles	Phenanthrene	WB	3	0	9.4	9.8	4.8	0.10
Columbia River	Semivolatiles	Pyrene	FS	2	0	18	19	9.2	0.14
Columbia River	Semivolatiles	Pyrene	WB	3	0	19	20	9.6	0.21
Columbia River	Semivolatiles	Retene	FS	2	0	18	19	9.2	0.14
Columbia River	Semivolatiles	Retene	WB	3	0	19	20	9.6	0.21
Yakima River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	920	940	460	5.8
Yakima River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	890	950	460	16
Yakima River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	920	940	460	5.8
Yakima River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	890	950	460	16
Yakima River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	920	940	460	5.8
Yakima River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	890	950	460	16
Yakima River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	920	940	460	5.8
Yakima River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	890	950	460	16
Yakima River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	920	940	460	5.8
Yakima River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	890	950	460	16
Yakima River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	370	380	190	2.3
Yakima River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	360	380	190	6.6
Yakima River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	920	940	460	5.8
Yakima River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	890	950	460	16
Yakima River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	370	380	190	2.3
Yakima River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	360	380	190	6.6
Yakima River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	370	380	190	2.3
Yakima River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	360	380	190	6.6
Yakima River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	370	380	190	2.3
Yakima River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	360	380	190	6.6
Yakima River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	370	380	190	2.3
Yakima River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	360	380	190	6.6
Yakima River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	920	940	460	5.8
Yakima River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	890	950	460	16
Yakima River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	370	380	190	2.3
Yakima River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	360	380	190	6.6
Yakima River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	370	380	190	2.3
Yakima River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	360	380	190	6.6
Yakima River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	370	380	190	2.3
Yakima River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	360	380	190	6.6
Yakima River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	370	380	190	2.3
Yakima River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	360	380	190	6.6
Yakima River	Guaiacols/Phenols	Phenol	FS	3	0	370	380	190	2.3
Yakima River	Guaiacols/Phenols	Phenol	WB	3	0	360	380	190	6.6
Yakima River	Metals	Aluminum	FS	3	2	540	1,000	640	220
Yakima River	Metals	Aluminum	WB	3	3	5,600	7,800	7,000	1,300
Yakima River	Metals	Antimony	FS	3	0	50	50	25	0.00
Yakima River	Metals	Antimony	WB	3	0	50	50	25	0.00
Yakima River	Metals	Arsenic	FS	3	2	50	69	53	25
Yakima River	Metals	Arsenic	WB	3	3	110	150	120	23

Appendix D-2: Tributary Summary Statistics
Channel Catfish

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Metals	Barium	FS	3	3	740	950	830	110
Yakima River	Metals	Barium	WB	3	3	1,300	1,900	1,500	320
Yakima River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Yakima River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Yakima River	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
Yakima River	Metals	Cadmium	WB	3	3	18	26	21	4.6
Yakima River	Metals	Chromium	FS	3	3	180	350	270	86
Yakima River	Metals	Chromium	WB	3	3	270	280	270	5.8
Yakima River	Metals	Cobalt	FS	3	3	110	280	170	92
Yakima River	Metals	Cobalt	WB	3	3	160	210	180	24
Yakima River	Metals	Copper	FS	3	3	310	340	330	15
Yakima River	Metals	Copper	WB	3	3	480	550	510	33
Yakima River	Metals	Lead	FS	3	0	10	10	5.0	0.00
Yakima River	Metals	Lead	WB	3	3	20	33	25	6.8
Yakima River	Metals	Manganese	FS	3	3	210	360	270	81
Yakima River	Metals	Manganese	WB	3	3	2,400	2,800	2,500	230
Yakima River	Metals	Mercury	FS	3	3	260	280	270	7.1
Yakima River	Metals	Mercury	WB	3	3	140	230	200	50
Yakima River	Metals	Nickel	FS	3	2	30	77	49	31
Yakima River	Metals	Nickel	WB	3	3	100	130	120	11
Yakima River	Metals	Selenium	FS	3	3	240	270	250	15
Yakima River	Metals	Selenium	WB	3	3	410	450	430	21
Yakima River	Metals	Silver	FS	3	0	100	100	50	0.00
Yakima River	Metals	Silver	WB	3	0	100	100	50	0.00
Yakima River	Metals	Thallium	FS	3	0	50	50	25	0.00
Yakima River	Metals	Thallium	WB	3	0	50	50	25	0.00
Yakima River	Metals	Vanadium	FS	3	1	10	23	11	10
Yakima River	Metals	Vanadium	WB	3	3	130	190	150	32
Yakima River	Metals	Zinc	FS	3	3	8,200	10,000	9,200	900
Yakima River	Metals	Zinc	WB	3	3	17,000	18,000	18,000	550
Yakima River	PCBs	Aroclor 1016	FS	3	0	19	20	9.7	0.29
Yakima River	PCBs	Aroclor 1016	WB	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1221	FS	3	0	19	20	9.7	0.29
Yakima River	PCBs	Aroclor 1221	WB	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1232	FS	3	0	19	20	9.7	0.29
Yakima River	PCBs	Aroclor 1232	WB	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1242	FS	3	0	19	20	9.7	0.29
Yakima River	PCBs	Aroclor 1242	WB	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1248	FS	3	0	19	20	9.7	0.29
Yakima River	PCBs	Aroclor 1248	WB	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1254	FS	3	3	29	69	51	20
Yakima River	PCBs	Aroclor 1254	WB	3	3	36	58	44	12
Yakima River	PCBs	Aroclor 1260	FS	3	3	57	130	100	40
Yakima River	PCBs	Aroclor 1260	WB	3	3	81	140	100	33
Yakima River	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Aldrin	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Alpha-BHC	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Alpha-Chlordane	FS	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Alpha-Chlordane	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Beta-BHC	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	3	2.6	7.4	5.4	2.5
Yakima River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	3	2.4	7.6	4.6	2.7
Yakima River	Pesticides	cis-Nonachlor	FS	3	1	1.9	2.6	1.5	0.95
Yakima River	Pesticides	cis-Nonachlor	WB	3	3	2.3	2.5	2.4	0.12
Yakima River	Pesticides	DDD-o,p'	FS	3	3	15	31	24	8.3
Yakima River	Pesticides	DDD-o,p'	WB	3	3	18	28	22	5.3
Yakima River	Pesticides	DDE-o,p'	FS	3	3	7.4	13	9.3	3.2
Yakima River	Pesticides	DDE-o,p'	WB	3	3	4.8	7.5	6.3	1.4
Yakima River	Pesticides	DDT-o,p'	FS	3	3	3.5	14	8.8	5.3
Yakima River	Pesticides	DDT-o,p'	WB	3	2	1.9	6.9	4.7	3.3
Yakima River	Pesticides	DDD-p,p'	FS	3	3	41	150	100	56
Yakima River	Pesticides	DDD-p,p'	WB	3	3	58	100	81	21
Yakima River	Pesticides	DDE-p,p'	FS	3	3	620	1,300	1,000	350
Yakima River	Pesticides	DDE-p,p'	WB	3	3	520	900	730	190
Yakima River	Pesticides	DDT-p,p'	FS	3	3	17	87	49	35
Yakima River	Pesticides	DDT-p,p'	WB	3	3	30	45	40	8.7
Yakima River	Pesticides	DDMU	FS	3	3	30	69	50	20
Yakima River	Pesticides	DDMU	WB	3	3	28	43	36	7.6
Yakima River	Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Delta-BHC	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Endosulfan Sulfate	FS	3	3	1.9	3.1	2.6	0.61
Yakima River	Pesticides	Endosulfan Sulfate	WB	3	3	1.8	2.1	1.9	0.15
Yakima River	Pesticides	Gamma-Chlordane	FS	3	2	0.97	1.9	1.1	0.31
Yakima River	Pesticides	Gamma-Chlordane	WB	3	3	1.9	2.5	2.2	0.30

Appendix D-2: Tributary Summary Statistics
Channel Catfish

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Pesticides	gamma-Chlordene	FS	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	gamma-Chlordene	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Heptachlor	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Heptachlor Epoxide	FS	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Hexachlorobenzene	FS	3	2	1.9	3.7	2.4	1.4
Yakima River	Pesticides	Hexachlorobenzene	WB	3	3	3.1	6.7	5.1	1.8
Yakima River	Pesticides	Lindane	FS	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Lindane	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Mirex	FS	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Mirex	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Oxychlordane	FS	3	3	1.0	1.2	1.1	0.12
Yakima River	Pesticides	Oxychlordane	WB	3	3	1.4	2.2	1.7	0.44
Yakima River	Pesticides	Pentachloroanisol	FS	3	2	0.99	1.9	1.0	0.078
Yakima River	Pesticides	Pentachloroanisol	WB	3	3	0.96	1.1	1.1	0.081
Yakima River	Pesticides	Toxaphene	FS	3	0	57	59	29	0.50
Yakima River	Pesticides	Toxaphene	WB	3	0	57	58	29	0.29
Yakima River	Pesticides	trans-Nonachlor	FS	3	3	5.8	13	9.9	3.7
Yakima River	Pesticides	trans-Nonachlor	WB	3	3	11	13	12	1.0
Yakima River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	18	19	9.3	0.12
Yakima River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	18	19	9.3	0.32
Yakima River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	37	38	19	0.23
Yakima River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	36	38	19	0.66
Yakima River	Semivolatiles	2-Chloronaphthalene	FS	3	0	18	19	9.3	0.12
Yakima River	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	19	9.3	0.32
Yakima River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	Acenaphthene	FS	3	0	18	19	9.3	0.12
Yakima River	Semivolatiles	Acenaphthene	WB	3	0	18	19	9.3	0.32
Yakima River	Semivolatiles	Acenaphthylene	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	Acenaphthylene	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	Anthracene	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	Anthracene	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	18	19	9.3	0.12
Yakima River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	19	9.3	0.32
Yakima River	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	18	19	9.3	0.12
Yakima River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	19	9.3	0.32
Yakima River	Semivolatiles	Chrysene	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	Chrysene	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	18	19	9.3	0.12
Yakima River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	19	9.3	0.32
Yakima River	Semivolatiles	Dibenzofuran	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	Dibenzofuran	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	Fluoranthene	FS	3	0	18	19	9.3	0.12
Yakima River	Semivolatiles	Fluoranthene	WB	3	0	18	19	9.3	0.32
Yakima River	Semivolatiles	9H-Fluorene	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	9H-Fluorene	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	Hexachloroethane	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	Hexachloroethane	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	18	19	9.3	0.12
Yakima River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	19	9.3	0.32
Yakima River	Semivolatiles	Naphthalene	FS	3	0	15	20	8.7	1.3
Yakima River	Semivolatiles	Naphthalene	WB	3	0	12	15	6.8	0.67

Appendix D-2: Tributary Summary Statistics
Channel Catfish

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	Nitrobenzene	FS	3	0	9.2	9.4	4.6	0.058
Yakima River	Semivolatiles	Nitrobenzene	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	Phenanthrene	FS	3	0	9.2	9.8	4.7	0.15
Yakima River	Semivolatiles	Phenanthrene	WB	3	0	8.9	9.5	4.6	0.16
Yakima River	Semivolatiles	Pyrene	FS	3	0	18	19	9.3	0.12
Yakima River	Semivolatiles	Pyrene	WB	3	0	18	19	9.3	0.32
Yakima River	Semivolatiles	Retene	FS	3	0	18	19	9.3	0.12
Yakima River	Semivolatiles	Retene	WB	3	0	18	19	9.3	0.32

Appendix D-2: Tributary Summary Statistics
Smallmouth Bass

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples		Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3		0	570	840	370	77
Yakima River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3		0	860	900	440	12
Yakima River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3		0	570	840	370	77
Yakima River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3		0	860	900	440	12
Yakima River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3		0	570	840	370	77
Yakima River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3		0	860	900	440	12
Yakima River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3		0	570	840	370	77
Yakima River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3		0	860	900	440	12
Yakima River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3		0	570	840	370	77
Yakima River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3		0	860	900	440	12
Yakima River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3		0	230	340	150	31
Yakima River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3		0	340	360	170	4.7
Yakima River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3		0	570	840	370	77
Yakima River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3		0	860	900	440	12
Yakima River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3		0	230	340	150	31
Yakima River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3		0	340	360	170	4.7
Yakima River	Guaiacols/Phenols	2-Chlorophenol	FS	3		0	230	340	150	31
Yakima River	Guaiacols/Phenols	2-Chlorophenol	WB	3		0	340	360	170	4.7
Yakima River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3		0	230	340	150	31
Yakima River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3		0	340	360	170	4.7
Yakima River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3		0	230	340	150	31
Yakima River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3		0	340	360	170	4.7
Yakima River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3		0	570	840	370	77
Yakima River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3		0	860	900	440	12
Yakima River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3		0	230	340	150	31
Yakima River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3		0	340	360	170	4.7
Yakima River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3		0	230	340	150	31
Yakima River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3		0	340	360	170	4.7
Yakima River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3		0	230	340	150	31
Yakima River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3		0	340	360	170	4.7
Yakima River	Guaiacols/Phenols	Pentachlorophenol	FS	3		0	230	340	150	31
Yakima River	Guaiacols/Phenols	Pentachlorophenol	WB	3		0	340	360	170	4.7
Yakima River	Guaiacols/Phenols	Phenol	FS	3		0	230	340	150	31
Yakima River	Guaiacols/Phenols	Phenol	WB	3		0	340	360	170	4.7
Yakima River	Metals	Aluminum	FS	3		3	5,000	8,100	6,500	1,500
Yakima River	Metals	Aluminum	WB	3		3	1,000	1,500	1,300	260
Yakima River	Metals	Antimony	FS	3		0	50	50	25	0.00
Yakima River	Metals	Antimony	WB	3		0	50	50	25	0.00
Yakima River	Metals	Arsenic	FS	3		3	110	170	140	31
Yakima River	Metals	Arsenic	WB	3		3	160	170	170	5.8
Yakima River	Metals	Barium	FS	3		3	360	610	490	130
Yakima River	Metals	Barium	WB	3		3	550	960	740	210
Yakima River	Metals	Beryllium	FS	3		0	4.0	4.0	2.0	0.00
Yakima River	Metals	Beryllium	WB	3		0	4.0	4.0	2.0	0.00
Yakima River	Metals	Cadmium	FS	3		0	4.0	4.0	2.0	0.00
Yakima River	Metals	Cadmium	WB	3		3	4.8	19	12	7.1
Yakima River	Metals	Chromium	FS	3		3	220	330	280	57
Yakima River	Metals	Chromium	WB	3		2	100	230	140	90
Yakima River	Metals	Cobalt	FS	3		3	14	16	15	1.2
Yakima River	Metals	Cobalt	WB	3		3	120	190	140	40
Yakima River	Metals	Copper	FS	3		3	510	560	540	28
Yakima River	Metals	Copper	WB	3		3	500	560	520	31
Yakima River	Metals	Lead	FS	3		2	10	55	28	25
Yakima River	Metals	Lead	WB	3		3	10	140	66	64
Yakima River	Metals	Manganese	FS	3		3	750	1,100	870	180
Yakima River	Metals	Manganese	WB	3		3	2,000	2,400	2,300	240
Yakima River	Metals	Mercury	FS	3		3	380	470	420	48
Yakima River	Metals	Mercury	WB	3		3	220	360	300	69
Yakima River	Metals	Nickel	FS	3		3	130	340	200	120
Yakima River	Metals	Nickel	WB	3		3	54	96	76	21
Yakima River	Metals	Selenium	FS	3		3	450	530	490	39
Yakima River	Metals	Selenium	WB	3		3	480	710	590	110
Yakima River	Metals	Silver	FS	3		0	100	100	50	0.00
Yakima River	Metals	Silver	WB	3		0	100	100	50	0.00
Yakima River	Metals	Thallium	FS	3		0	50	50	25	0.00
Yakima River	Metals	Thallium	WB	3		0	50	50	25	0.00
Yakima River	Metals	Vanadium	FS	3		1	10	14	8.0	5.2
Yakima River	Metals	Vanadium	WB	3		3	19	88	63	38
Yakima River	Metals	Zinc	FS	3		3	9,200	10,000	9,700	430
Yakima River	Metals	Zinc	WB	3		3	15,000	18,000	17,000	1,300
Yakima River	PCBs	Aroclor 1016	FS	3		0	18	23	10	1.3
Yakima River	PCBs	Aroclor 1016	WB	3		0	18	20	9.7	0.58
Yakima River	PCBs	Aroclor 1221	FS	3		0	18	23	10	1.3
Yakima River	PCBs	Aroclor 1221	WB	3		0	18	20	9.7	0.58
Yakima River	PCBs	Aroclor 1232	FS	3		0	18	23	10	1.3
Yakima River	PCBs	Aroclor 1232	WB	3		0	18	20	9.7	0.58

Appendix D-2: Tributary Summary Statistics
Smallmouth Bass

Tributary	Chemical Group	Chemical	Sample Type	Number of		Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
				Samples	Detection					
Yakima River	PCBs	Aroclor 1242	FS	3	0	18	23	10	1.3	
Yakima River	PCBs	Aroclor 1242	WB	3	0	18	20	9.7	0.58	
Yakima River	PCBs	Aroclor 1248	FS	3	0	18	23	10	1.3	
Yakima River	PCBs	Aroclor 1248	WB	3	0	18	20	9.7	0.58	
Yakima River	PCBs	Aroclor 1254	FS	3	3	38	83	55	25	
Yakima River	PCBs	Aroclor 1254	WB	3	3	46	94	66	25	
Yakima River	PCBs	Aroclor 1260	FS	3	3	68	220	120	87	
Yakima River	PCBs	Aroclor 1260	WB	3	3	80	190	130	56	
Yakima River	Pesticides	Aldrin	FS	3	0	1.8	2.3	1.0	0.13	
Yakima River	Pesticides	Aldrin	WB	3	0	1.8	2.0	0.97	0.058	
Yakima River	Pesticides	Alpha-BHC	FS	3	0	1.8	2.3	1.0	0.13	
Yakima River	Pesticides	Alpha-BHC	WB	3	0	1.8	2.0	0.97	0.058	
Yakima River	Pesticides	Alpha-Chlordane	FS	3	0	1.8	2.3	1.0	0.13	
Yakima River	Pesticides	Alpha-Chlordane	WB	3	0	1.8	2.0	0.97	0.058	
Yakima River	Pesticides	Beta-BHC	FS	3	0	1.8	2.3	1.0	0.13	
Yakima River	Pesticides	Beta-BHC	WB	3	0	1.8	2.0	0.97	0.058	
Yakima River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	1	1.8	4.1	2.1	1.8	
Yakima River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	2	2.0	4.7	3.1	1.9	
Yakima River	Pesticides	cis-Nonachlor	FS	3	0	1.8	2.3	1.0	0.13	
Yakima River	Pesticides	cis-Nonachlor	WB	3	1	1.4	2.0	1.1	0.26	
Yakima River	Pesticides	DDD-o,p'	FS	3	3	11	20	15	4.5	
Yakima River	Pesticides	DDD-o,p'	WB	3	3	18	27	21	4.9	
Yakima River	Pesticides	DDE-o,p'	FS	3	3	5.2	9.4	6.7	2.3	
Yakima River	Pesticides	DDE-o,p'	WB	3	3	10	14	12	2.0	
Yakima River	Pesticides	DDT-o,p'	FS	3	3	5.7	18	9.9	7.0	
Yakima River	Pesticides	DDT-o,p'	WB	3	3	12	20	17	4.4	
Yakima River	Pesticides	DDD-p,p'	FS	3	3	30	85	51	30	
Yakima River	Pesticides	DDD-p,p'	WB	3	3	40	63	54	12	
Yakima River	Pesticides	DDE-p,p'	FS	3	3	480	1,200	770	380	
Yakima River	Pesticides	DDE-p,p'	WB	3	3	970	1,700	1,300	370	
Yakima River	Pesticides	DDT-p,p'	FS	3	3	23	48	34	13	
Yakima River	Pesticides	DDT-p,p'	WB	3	3	44	80	62	18	
Yakima River	Pesticides	DDMU	FS	3	3	20	56	32	21	
Yakima River	Pesticides	DDMU	WB	3	3	33	55	41	12	
Yakima River	Pesticides	Delta-BHC	FS	3	0	1.8	2.3	1.0	0.13	
Yakima River	Pesticides	Delta-BHC	WB	3	0	1.8	2.0	0.97	0.058	
Yakima River	Pesticides	Endosulfan Sulfate	FS	3	3	1.5	3.0	2.1	0.78	
Yakima River	Pesticides	Endosulfan Sulfate	WB	3	3	2.4	5.6	3.8	1.6	
Yakima River	Pesticides	Gamma-Chlordane	FS	3	1	1.8	14	5.4	7.5	
Yakima River	Pesticides	Gamma-Chlordane	WB	3	0	1.8	2.0	0.97	0.058	
Yakima River	Pesticides	gamma-Chlordane	FS	3	0	1.8	2.3	1.0	0.13	
Yakima River	Pesticides	gamma-Chlordane	WB	3	0	1.8	2.0	0.97	0.058	
Yakima River	Pesticides	Heptachlor	FS	3	0	1.8	2.3	1.0	0.13	
Yakima River	Pesticides	Heptachlor	WB	3	0	1.8	2.0	0.97	0.058	
Yakima River	Pesticides	Heptachlor Epoxide	FS	3	0	1.8	2.3	1.0	0.13	
Yakima River	Pesticides	Heptachlor Epoxide	WB	3	0	1.8	2.0	0.97	0.058	
Yakima River	Pesticides	Hexachlorobenzene	FS	3	1	1.8	2.4	1.5	0.80	
Yakima River	Pesticides	Hexachlorobenzene	WB	3	3	1.1	1.4	1.2	0.15	
Yakima River	Pesticides	Lindane	FS	3	0	1.8	2.3	1.0	0.13	
Yakima River	Pesticides	Lindane	WB	3	0	1.8	2.0	0.97	0.058	
Yakima River	Pesticides	Mirex	FS	3	0	1.8	2.3	1.0	0.13	
Yakima River	Pesticides	Mirex	WB	3	0	1.8	2.0	0.97	0.058	
Yakima River	Pesticides	Oxychlordane	FS	3	1	1.6	2.3	1.2	0.35	
Yakima River	Pesticides	Oxychlordane	WB	3	3	1.4	2.6	1.8	0.67	
Yakima River	Pesticides	Pentachloroanisole	FS	3	1	0.79	2.3	0.95	0.18	
Yakima River	Pesticides	Pentachloroanisole	WB	3	1	0.99	2.0	0.96	0.055	
Yakima River	Pesticides	Toxaphene	FS	3	0	54	68	30	3.5	
Yakima River	Pesticides	Toxaphene	WB	3	0	55	60	29	1.3	
Yakima River	Pesticides	trans-Nonachlor	FS	3	3	2.6	8.6	4.7	3.4	
Yakima River	Pesticides	trans-Nonachlor	WB	3	3	7.1	14	10	3.5	
Yakima River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	11	17	7.5	1.5	
Yakima River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	17	18	8.7	0.24	
Yakima River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	23	34	15	3.1	
Yakima River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	34	36	17	0.47	
Yakima River	Semivolatiles	2-Chloronaphthalene	FS	3	0	11	17	7.5	1.5	
Yakima River	Semivolatiles	2-Chloronaphthalene	WB	3	0	17	18	8.7	0.24	
Yakima River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	Acenaphthene	FS	3	0	11	17	7.5	1.5	
Yakima River	Semivolatiles	Acenaphthene	WB	3	0	17	18	8.7	0.24	

Appendix D-2: Tributary Summary Statistics
Smallmouth Bass

Tributary	Chemical Group	Chemical	Sample Type	Number		Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
				of Samples	Detection					
Yakima River	Semivolatiles	Acenaphthylene	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	Acenaphthylene	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	Anthracene	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	Anthracene	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	Benzo(a)anthracene	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	Benzo(a)pyrene	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	11	17	7.5	1.5	
Yakima River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	17	18	8.7	0.24	
Yakima River	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	11	17	7.5	1.5	
Yakima River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	17	18	8.7	0.24	
Yakima River	Semivolatiles	Chrysene	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	Chrysene	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	11	17	7.5	1.5	
Yakima River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	17	18	8.7	0.24	
Yakima River	Semivolatiles	Dibenzofuran	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	Dibenzofuran	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	Fluoranthene	FS	3	0	11	17	7.5	1.5	
Yakima River	Semivolatiles	Fluoranthene	WB	3	0	17	18	8.7	0.24	
Yakima River	Semivolatiles	9H-Fluorene	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	9H-Fluorene	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	Hexachlorobutadiene	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	Hexachloroethane	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	Hexachloroethane	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	11	17	7.5	1.5	
Yakima River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	17	18	8.7	0.24	
Yakima River	Semivolatiles	Naphthalene	FS	3	0	10	17	6.3	1.8	
Yakima River	Semivolatiles	Naphthalene	WB	3	0	9.4	24	8.4	3.7	
Yakima River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	Nitrobenzene	FS	3	0	5.7	8.4	3.8	0.78	
Yakima River	Semivolatiles	Nitrobenzene	WB	3	0	8.6	9.0	4.4	0.12	
Yakima River	Semivolatiles	Phenanthrene	FS	3	0	5.7	9.9	4.0	1.1	
Yakima River	Semivolatiles	Phenanthrene	WB	3	1	8.6	16	8.2	6.8	
Yakima River	Semivolatiles	Pyrene	FS	3	0	11	17	7.5	1.5	
Yakima River	Semivolatiles	Pyrene	WB	3	0	17	18	8.7	0.24	
Yakima River	Semivolatiles	Retene	FS	3	0	11	17	7.5	1.5	
Yakima River	Semivolatiles	Retene	WB	3	0	17	18	8.7	0.24	

Appendix D-2: Tributary Summary Statistics
Coho Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Dioxin/furans	2,3,7,8-TCDD	E	3	2	0.000010	0.000050	0.000035	0.000026
Umatilla River	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000010	0.000040	0.000017	0.000020
Umatilla River	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000010	0.000050	0.000017	0.000010
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDD	E	3	1	0.000010	0.000010	0.000037	0.000055
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000010	0.000060	0.000038	0.000029
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.000010	0.000060	0.000020	0.000013
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDD	E	3	1	0.000010	0.000010	0.000067	0.0000029
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000010	0.000010	0.000050	0.00
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000010	0.000020	0.000083	0.0000029
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDD	E	3	2	0.000010	0.000080	0.000048	0.000039
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	2	0.000010	0.000050	0.000035	0.000026
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	0	0.000010	0.000020	0.000083	0.0000029
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDD	E	3	0	0.000010	0.000010	0.000050	0.00
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000010	0.000030	0.000013	0.000014
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	1	0.000020	0.000020	0.000013	0.0000058
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	E	3	3	0.000080	0.00021	0.00014	0.000065
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000010	0.00018	0.000095	0.000088
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	1	0.000010	0.000060	0.000030	0.000028
Umatilla River	Dioxin/furans	OCDD	E	3	3	0.0013	0.0025	0.0018	0.00066
Umatilla River	Dioxin/furans	OCDD	FS	3	3	0.000090	0.00085	0.00037	0.00042
Umatilla River	Dioxin/furans	OCDD	WB	3	2	0.000010	0.00025	0.00014	0.00012
Umatilla River	Dioxin/furans	2,3,7,8-TCDF	E	3	3	0.00029	0.00066	0.00051	0.00020
Umatilla River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00035	0.00054	0.00046	0.000097
Umatilla River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00036	0.00049	0.00044	0.000072
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDF	E	3	1	0.000010	0.000030	0.000013	0.000014
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	0	0.000010	0.000010	0.000050	0.00
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	0	0.000020	0.000030	0.000013	0.0000029
Umatilla River	Dioxin/furans	2,3,4,7,8-PeCDF	E	3	2	0.000010	0.00010	0.000068	0.000055
Umatilla River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	2	0.000010	0.000090	0.000048	0.000043
Umatilla River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	2	0.000020	0.000080	0.000050	0.000036
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDF	E	3	2	0.000010	0.000050	0.000025	0.000023
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.000050	0.00
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	0	0.000010	0.000020	0.000083	0.0000029
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDF	E	3	1	0.000010	0.000030	0.000013	0.000014
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.000050	0.00
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	0	0.000010	0.000020	0.000083	0.0000029
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDF	E	3	0	0.000010	0.000010	0.000050	0.00
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000020	0.000083	0.0000029
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000020	0.000083	0.0000029
Umatilla River	Dioxin/furans	2,3,4,6,7,8-HxCDF	E	3	1	0.000010	0.000040	0.000017	0.000020
Umatilla River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.000050	0.00
Umatilla River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	0	0.000010	0.000020	0.000083	0.0000029
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	E	3	1	0.000010	0.00019	0.000067	0.000011
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000010	0.000050	0.000028	0.000023
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000010	0.000030	0.000012	0.0000058
Umatilla River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	E	3	2	0.000010	0.000050	0.000032	0.000024
Umatilla River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000010	0.000050	0.00
Umatilla River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000030	0.000012	0.0000058
Umatilla River	Dioxin/furans	OCDF	E	3	2	0.000010	0.00022	0.00014	0.00011
Umatilla River	Dioxin/furans	OCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
Umatilla River	Dioxin/furans	OCDF	WB	3	0	0.000030	0.000060	0.000025	0.0000087
Umatilla River	Guaiacols/Phenols	4-Chloroguaiacol	E	3	0	970	1,000	490	9.5
Umatilla River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	950	970	480	6.5
Umatilla River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	880	960	460	21
Umatilla River	Guaiacols/Phenols	3,4-Dichloroguaiacol	E	3	0	970	1,000	490	9.5
Umatilla River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	950	970	480	6.5
Umatilla River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	880	960	460	21
Umatilla River	Guaiacols/Phenols	4,5-Dichloroguaiacol	E	3	0	970	1,000	490	9.5
Umatilla River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	950	970	480	6.5
Umatilla River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	880	960	460	21
Umatilla River	Guaiacols/Phenols	4,6-Dichloroguaiacol	E	3	0	970	1,000	490	9.5
Umatilla River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	950	970	480	6.5
Umatilla River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	880	960	460	21
Umatilla River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	E	3	0	970	1,000	490	9.5
Umatilla River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	950	970	480	6.5
Umatilla River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	880	960	460	21
Umatilla River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	E	3	0	390	400	200	3.8
Umatilla River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	380	390	190	2.5
Umatilla River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	350	390	180	8.5
Umatilla River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	E	3	0	970	1,000	490	9.5
Umatilla River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	950	970	480	6.5
Umatilla River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	880	960	460	21
Umatilla River	Guaiacols/Phenols	Tetrachloroguaiacol	E	3	0	390	400	200	3.8
Umatilla River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	380	390	190	2.5
Umatilla River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	350	390	180	8.5
Umatilla River	Guaiacols/Phenols	2-Chlorophenol	E	3	0	390	400	200	3.8
Umatilla River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	380	390	190	2.5

Appendix D-2: Tributary Summary Statistics
Coho Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	350	390	180	8.5
Umatilla River	Guaiacols/Phenols	4-Chloro-3-methylphenol	E	3	0	390	400	200	3.8
Umatilla River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	380	390	190	2.5
Umatilla River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	350	390	180	8.5
Umatilla River	Guaiacols/Phenols	2,4-Dichlorophenol	E	3	0	390	400	200	3.8
Umatilla River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	380	390	190	2.5
Umatilla River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	350	390	180	8.5
Umatilla River	Guaiacols/Phenols	2,4-Dimethylphenol	E	3	0	970	1,000	490	9.5
Umatilla River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	950	970	480	6.5
Umatilla River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	880	960	460	21
Umatilla River	Guaiacols/Phenols	2,4,5-Trichlorophenol	E	3	0	390	400	200	3.8
Umatilla River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	380	390	190	2.5
Umatilla River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	350	390	180	8.5
Umatilla River	Guaiacols/Phenols	2,4,6-Trichlorophenol	E	3	0	390	400	200	3.8
Umatilla River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	380	390	190	2.5
Umatilla River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	350	390	180	8.5
Umatilla River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	E	3	0	390	400	200	3.8
Umatilla River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	380	390	190	2.5
Umatilla River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	350	390	180	8.5
Umatilla River	Guaiacols/Phenols	Pentachlorophenol	E	3	0	390	400	200	3.8
Umatilla River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	380	390	190	2.5
Umatilla River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	350	390	180	8.5
Umatilla River	Guaiacols/Phenols	Phenol	E	3	0	390	400	200	3.8
Umatilla River	Guaiacols/Phenols	Phenol	FS	3	0	380	390	190	2.5
Umatilla River	Guaiacols/Phenols	Phenol	WB	3	0	350	390	180	8.5
Umatilla River	Metals	Aluminum	E	3	1	1,000	1,600	850	610
Umatilla River	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
Umatilla River	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
Umatilla River	Metals	Antimony	E	3	0	50	50	25	0.00
Umatilla River	Metals	Antimony	FS	3	0	50	50	25	0.00
Umatilla River	Metals	Antimony	WB	3	0	50	50	25	0.00
Umatilla River	Metals	Arsenic	E	3	3	310	360	330	26
Umatilla River	Metals	Arsenic	FS	3	3	450	600	540	78
Umatilla River	Metals	Arsenic	WB	3	3	450	560	500	53
Umatilla River	Metals	Barium	E	3	0	200	200	100	0.00
Umatilla River	Metals	Barium	FS	3	1	200	270	160	98
Umatilla River	Metals	Barium	WB	3	1	200	220	140	69
Umatilla River	Metals	Beryllium	E	3	0	4.0	4.0	2.0	0.00
Umatilla River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Umatilla River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Umatilla River	Metals	Cadmium	E	3	0	4.0	4.0	2.0	0.00
Umatilla River	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
Umatilla River	Metals	Cadmium	WB	3	3	19	27	22	4.2
Umatilla River	Metals	Chromium	E	3	0	100	100	50	0.00
Umatilla River	Metals	Chromium	FS	3	3	120	190	140	40
Umatilla River	Metals	Chromium	WB	3	3	120	140	130	10
Umatilla River	Metals	Cobalt	E	3	3	10	14	12	2.1
Umatilla River	Metals	Cobalt	FS	3	3	110	140	120	14
Umatilla River	Metals	Cobalt	WB	3	3	120	140	120	15
Umatilla River	Metals	Copper	E	3	3	4,100	5,000	4,500	470
Umatilla River	Metals	Copper	FS	3	3	680	3,600	1,700	1,600
Umatilla River	Metals	Copper	WB	3	3	720	2,400	1,300	880
Umatilla River	Metals	Lead	E	3	0	10	10	5.0	0.00
Umatilla River	Metals	Lead	FS	3	2	10	230	81	120
Umatilla River	Metals	Lead	WB	3	3	11	20	15	4.7
Umatilla River	Metals	Manganese	E	3	3	630	790	700	83
Umatilla River	Metals	Manganese	FS	3	3	120	330	190	110
Umatilla River	Metals	Manganese	WB	3	3	390	560	500	94
Umatilla River	Metals	Mercury	E	3	0	100	100	50	0.00
Umatilla River	Metals	Mercury	FS	3	3	110	120	120	7.6
Umatilla River	Metals	Mercury	WB	3	3	73	130	100	28
Umatilla River	Metals	Nickel	E	3	3	35	150	84	57
Umatilla River	Metals	Nickel	FS	3	2	30	100	54	44
Umatilla River	Metals	Nickel	WB	3	3	53	3,400	1,200	1,900
Umatilla River	Metals	Selenium	E	3	3	1,100	1,300	1,200	72
Umatilla River	Metals	Selenium	FS	3	3	270	310	290	21
Umatilla River	Metals	Selenium	WB	3	3	330	420	360	49
Umatilla River	Metals	Silver	E	3	0	100	100	50	0.00
Umatilla River	Metals	Silver	FS	3	0	100	100	50	0.00
Umatilla River	Metals	Silver	WB	3	0	100	100	50	0.00
Umatilla River	Metals	Thallium	E	3	0	50	50	25	0.00
Umatilla River	Metals	Thallium	FS	3	0	50	50	25	0.00
Umatilla River	Metals	Thallium	WB	3	0	50	50	25	0.00
Umatilla River	Metals	Vanadium	E	3	3	17	41	28	12
Umatilla River	Metals	Vanadium	FS	3	1	10	12	7.3	4.0
Umatilla River	Metals	Vanadium	WB	3	3	32	45	38	6.7
Umatilla River	Metals	Zinc	E	3	3	30,000	34,000	31,000	2,200

Appendix D-2: Tributary Summary Statistics
Coho Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Metals	Zinc	FS	3	3	6,700	7,800	7,100	590
Umatilla River	Metals	Zinc	WB	3	3	28,000	32,000	30,000	2,000
Umatilla River	PCBs	Aroclor 1016	E	3	0	19	19	9.5	0.00
Umatilla River	PCBs	Aroclor 1016	FS	3	0	18	20	9.7	0.58
Umatilla River	PCBs	Aroclor 1016	WB	3	0	18	20	9.5	0.50
Umatilla River	PCBs	Aroclor 1221	E	3	0	19	19	9.5	0.00
Umatilla River	PCBs	Aroclor 1221	FS	3	0	18	20	9.7	0.58
Umatilla River	PCBs	Aroclor 1221	WB	3	0	18	20	9.5	0.50
Umatilla River	PCBs	Aroclor 1232	E	3	0	19	19	9.5	0.00
Umatilla River	PCBs	Aroclor 1232	FS	3	0	18	20	9.7	0.58
Umatilla River	PCBs	Aroclor 1232	WB	3	0	18	20	9.5	0.50
Umatilla River	PCBs	Aroclor 1242	E	3	0	19	19	9.5	0.00
Umatilla River	PCBs	Aroclor 1242	FS	3	0	18	20	9.7	0.58
Umatilla River	PCBs	Aroclor 1242	WB	3	0	18	20	9.5	0.50
Umatilla River	PCBs	Aroclor 1248	E	3	0	19	19	9.5	0.00
Umatilla River	PCBs	Aroclor 1248	FS	3	0	18	20	9.7	0.58
Umatilla River	PCBs	Aroclor 1248	WB	3	0	18	20	9.5	0.50
Umatilla River	PCBs	Aroclor 1254	E	3	3	11	17	15	3.5
Umatilla River	PCBs	Aroclor 1254	FS	3	3	12	19	16	3.5
Umatilla River	PCBs	Aroclor 1254	WB	3	3	18	19	19	0.58
Umatilla River	PCBs	Aroclor 1260	E	3	0	19	19	9.5	0.00
Umatilla River	PCBs	Aroclor 1260	FS	3	0	18	20	9.7	0.58
Umatilla River	PCBs	Aroclor 1260	WB	3	0	18	20	9.5	0.50
Umatilla River	PCBs	PCB 77	E	3	3	0.010	0.011	0.010	0.00030
Umatilla River	PCBs	PCB 77	FS	3	3	0.0080	0.0084	0.0082	0.00017
Umatilla River	PCBs	PCB 77	WB	3	3	0.0088	0.011	0.0099	0.0013
Umatilla River	PCBs	PCB 105	E	3	3	0.27	0.35	0.32	0.041
Umatilla River	PCBs	PCB 105	FS	3	3	0.27	0.31	0.30	0.026
Umatilla River	PCBs	PCB 105	WB	3	3	0.29	0.33	0.31	0.020
Umatilla River	PCBs	PCB 114	E	3	3	0.024	0.034	0.029	0.0053
Umatilla River	PCBs	PCB 114	FS	3	3	0.024	0.032	0.028	0.0040
Umatilla River	PCBs	PCB 114	WB	3	3	0.024	0.031	0.027	0.0036
Umatilla River	PCBs	PCB 118	E	3	3	0.68	0.76	0.72	0.042
Umatilla River	PCBs	PCB 118	FS	3	3	0.67	0.74	0.72	0.039
Umatilla River	PCBs	PCB 118	WB	3	3	0.68	0.77	0.73	0.045
Umatilla River	PCBs	PCB 123	E	3	3	0.011	0.013	0.012	0.0010
Umatilla River	PCBs	PCB 123	FS	3	3	0.0094	0.015	0.012	0.0029
Umatilla River	PCBs	PCB 123	WB	3	3	0.0088	0.011	0.0099	0.0012
Umatilla River	PCBs	PCB 126	E	3	0	0.00077	0.0011	0.00048	0.000081
Umatilla River	PCBs	PCB 126	FS	3	0	0.00085	0.0020	0.00071	0.00029
Umatilla River	PCBs	PCB 126	WB	3	3	0.0031	0.0035	0.0033	0.00018
Umatilla River	PCBs	PCB 156	E	3	3	0.082	0.10	0.089	0.0095
Umatilla River	PCBs	PCB 156	FS	3	3	0.095	0.12	0.11	0.013
Umatilla River	PCBs	PCB 156	WB	3	3	0.090	0.11	0.097	0.0075
Umatilla River	PCBs	PCB 157	E	3	3	0.018	0.023	0.020	0.0030
Umatilla River	PCBs	PCB 157	FS	3	3	0.021	0.026	0.022	0.0030
Umatilla River	PCBs	PCB 157	WB	3	3	0.020	0.022	0.021	0.00085
Umatilla River	PCBs	PCB 167	E	3	3	0.035	0.038	0.037	0.0015
Umatilla River	PCBs	PCB 167	FS	3	3	0.045	0.051	0.047	0.0034
Umatilla River	PCBs	PCB 167	WB	3	3	0.042	0.049	0.046	0.0041
Umatilla River	PCBs	PCB 169	E	3	0	0.0010	0.0013	0.00055	0.000075
Umatilla River	PCBs	PCB 169	FS	3	0	0.0010	0.0011	0.00052	0.000015
Umatilla River	PCBs	PCB 169	WB	3	0	0.0010	0.0010	0.00050	0.00
Umatilla River	PCBs	PCB 170	E	3	3	0.15	0.19	0.16	0.023
Umatilla River	PCBs	PCB 170	FS	3	3	0.20	0.22	0.21	0.012
Umatilla River	PCBs	PCB 170	WB	3	3	0.18	0.19	0.19	0.0035
Umatilla River	PCBs	PCB 180	E	3	3	0.44	0.58	0.50	0.068
Umatilla River	PCBs	PCB 180	FS	3	3	0.64	0.73	0.69	0.043
Umatilla River	PCBs	PCB 180	WB	3	3	0.57	0.62	0.59	0.027
Umatilla River	PCBs	PCB 189	E	3	3	0.0051	0.0068	0.0058	0.00088
Umatilla River	PCBs	PCB 189	FS	3	3	0.0079	0.0091	0.0086	0.00060
Umatilla River	PCBs	PCB 189	WB	3	3	0.0073	0.0079	0.0076	0.00031
Umatilla River	Pesticides	Aldrin	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	Aldrin	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	Aldrin	WB	3	0	1.8	2.0	0.95	0.050
Umatilla River	Pesticides	Alpha-BHC	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	Alpha-BHC	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	Alpha-BHC	WB	3	0	1.8	2.0	0.95	0.050
Umatilla River	Pesticides	Alpha-Chlordane	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	Alpha-Chlordane	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	Alpha-Chlordane	WB	3	0	1.8	2.0	0.95	0.050
Umatilla River	Pesticides	Beta-BHC	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	Beta-BHC	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	Beta-BHC	WB	3	0	1.8	2.0	0.95	0.050
Umatilla River	Pesticides	cis-Chlordane (alpha-Chlordane)	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.8	2.0	0.95	0.050

Appendix D-2: Tributary Summary Statistics
Coho Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Pesticides	cis-Nonachlor	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	cis-Nonachlor	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	cis-Nonachlor	WB	3	0	1.8	2.0	0.95	0.050
Umatilla River	Pesticides	DDD-o,p'	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	DDD-o,p'	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	DDD-o,p'	WB	3	0	1.8	2.0	0.95	0.050
Umatilla River	Pesticides	DDE-o,p'	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	DDE-o,p'	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	DDE-o,p'	WB	3	0	1.8	2.0	0.95	0.050
Umatilla River	Pesticides	DDT-o,p'	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	DDT-o,p'	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	DDT-o,p'	WB	3	0	1.8	2.0	0.95	0.050
Umatilla River	Pesticides	DDD-p,p'	E	3	3	2.7	2.9	2.8	0.12
Umatilla River	Pesticides	DDD-p,p'	FS	3	3	2.5	2.9	2.7	0.21
Umatilla River	Pesticides	DDD-p,p'	WB	3	2	1.8	2.1	1.6	0.62
Umatilla River	Pesticides	DDE-p,p'	E	3	3	31	33	32	1.0
Umatilla River	Pesticides	DDE-p,p'	FS	3	3	29	35	33	3.2
Umatilla River	Pesticides	DDE-p,p'	WB	3	3	31	37	35	3.5
Umatilla River	Pesticides	DDT-p,p'	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	DDT-p,p'	FS	3	1	1.8	4.0	2.0	1.8
Umatilla River	Pesticides	DDT-p,p'	WB	3	2	2.0	4.0	3.0	1.7
Umatilla River	Pesticides	DDMU	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	DDMU	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	DDMU	WB	3	0	1.8	2.0	0.95	0.050
Umatilla River	Pesticides	Delta-BHC	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	Delta-BHC	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	Delta-BHC	WB	3	0	1.8	2.0	0.95	0.050
Umatilla River	Pesticides	Endosulfan Sulfate	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	2.0	0.95	0.071
Umatilla River	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	0.00	na
Umatilla River	Pesticides	Gamma-Chlordane	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	Gamma-Chlordane	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	Gamma-Chlordane	WB	3	0	1.8	2.0	0.95	0.050
Umatilla River	Pesticides	Gamma-Chlordane	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	Gamma-Chlordane	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	Gamma-Chlordane	WB	3	0	1.8	2.0	0.95	0.050
Umatilla River	Pesticides	Heptachlor	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	Heptachlor	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	Heptachlor	WB	3	0	1.8	2.0	0.95	0.050
Umatilla River	Pesticides	Heptachlor Epoxide	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	Heptachlor Epoxide	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	Heptachlor Epoxide	WB	3	0	1.8	2.0	0.95	0.050
Umatilla River	Pesticides	Hexachlorobenzene	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	Hexachlorobenzene	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	Hexachlorobenzene	WB	3	3	1.2	1.2	1.2	2.1E-08
Umatilla River	Pesticides	Lindane	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	Lindane	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	Lindane	WB	3	0	1.8	2.0	0.95	0.050
Umatilla River	Pesticides	Mirex	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	Mirex	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	Mirex	WB	3	0	1.8	2.0	0.95	0.050
Umatilla River	Pesticides	Oxychlordane	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	Oxychlordane	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	Oxychlordane	WB	3	0	1.8	2.0	0.95	0.050
Umatilla River	Pesticides	Pentachloroanisol	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	Pentachloroanisol	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	Pentachloroanisol	WB	3	0	1.8	2.0	0.95	0.050
Umatilla River	Pesticides	Toxaphene	E	3	0	56	57	28	0.29
Umatilla River	Pesticides	Toxaphene	FS	3	0	55	60	29	1.3
Umatilla River	Pesticides	Toxaphene	WB	3	0	55	59	29	1.0
Umatilla River	Pesticides	trans-Nonachlor	E	3	0	1.9	1.9	0.95	1.5E-08
Umatilla River	Pesticides	trans-Nonachlor	FS	3	0	1.8	2.0	0.97	0.058
Umatilla River	Pesticides	trans-Nonachlor	WB	3	0	1.8	2.0	0.95	0.050
Umatilla River	Semivolatiles	1,2,4-Trichlorobenzene	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	1,2-Diphenylhydrazine	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	2,4-Dinitrotoluene	E	3	0	19	20	9.7	0.23
Umatilla River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	19	150	32	39
Umatilla River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	140	150	74	3.3
Umatilla River	Semivolatiles	2,6-Dinitrotoluene	E	3	0	38	40	19	0.46
Umatilla River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	38	39	19	0.20
Umatilla River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	35	39	18	0.85
Umatilla River	Semivolatiles	2-Chloronaphthalene	E	3	0	19	20	9.7	0.23
Umatilla River	Semivolatiles	2-Chloronaphthalene	FS	3	0	19	19	9.6	0.10

Appendix D-2: Tributary Summary Statistics
Coho Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	19	9.2	0.40
Umatilla River	Semivolatiles	4-Bromophenyl-Phenylether	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	4-Chlorophenyl-Phenylether	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	Acenaphthene	E	3	0	19	20	9.7	0.23
Umatilla River	Semivolatiles	Acenaphthene	FS	3	0	19	19	9.6	0.10
Umatilla River	Semivolatiles	Acenaphthene	WB	3	0	18	19	9.2	0.40
Umatilla River	Semivolatiles	Acenaphthylene	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	Acenaphthylene	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	Acenaphthylene	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	Anthracene	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	Anthracene	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	Anthracene	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	Benzene, 1,2-dichloro-	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	Benzene, 1,3-dichloro-	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	Benzene, 1,4-dichloro-	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	Benzo(a)anthracene	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	Benzo(a)pyrene	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	Benzo(g,h,i)perylene	E	3	0	19	20	9.7	0.23
Umatilla River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	19	19	9.6	0.10
Umatilla River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	19	9.2	0.40
Umatilla River	Semivolatiles	Benzo[b]fluoranthene	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	Benzo[b]fluoranthene	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	Benzo[b]fluoranthene	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	Benzo[k]fluoranthene	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	bis(2-Chloroisopropyl)ether	E	3	0	19	20	9.7	0.23
Umatilla River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	19	19	9.6	0.10
Umatilla River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	19	9.2	0.40
Umatilla River	Semivolatiles	Chrysene	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	Chrysene	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	Chrysene	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	Dibenz[a,h]anthracene	E	3	0	19	20	9.7	0.23
Umatilla River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	19	19	9.6	0.10
Umatilla River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	19	9.2	0.40
Umatilla River	Semivolatiles	Dibenzofuran	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	Dibenzofuran	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	Dibenzofuran	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	Fluoranthene	E	3	0	19	20	9.7	0.23
Umatilla River	Semivolatiles	Fluoranthene	FS	3	0	19	19	9.6	0.10
Umatilla River	Semivolatiles	Fluoranthene	WB	3	0	18	19	9.2	0.40
Umatilla River	Semivolatiles	9H-Fluorene	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	9H-Fluorene	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	9H-Fluorene	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	Hexachlorobutadiene	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	Hexachloroethane	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	Hexachloroethane	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	Hexachloroethane	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	Indeno(1,2,3-cd)pyrene	E	3	0	19	20	9.7	0.23
Umatilla River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	19	19	9.6	0.10
Umatilla River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	19	9.2	0.40
Umatilla River	Semivolatiles	Naphthalene	E	3	0	21	24	11	0.75
Umatilla River	Semivolatiles	Naphthalene	FS	3	0	17	26	11	2.6
Umatilla River	Semivolatiles	Naphthalene	WB	3	0	18	19	9.1	0.31
Umatilla River	Semivolatiles	Naphthalene, 1-methyl-	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	Naphthalene, 2-methyl-	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	Nitrobenzene	E	3	0	9.6	10	4.9	0.12

Appendix D-2: Tributary Summary Statistics
Coho Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Semivolatiles	Nitrobenzene	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	Nitrobenzene	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	Phenanthrene	E	3	0	9.6	10	4.9	0.12
Umatilla River	Semivolatiles	Phenanthrene	FS	3	0	9.5	9.7	4.8	0.050
Umatilla River	Semivolatiles	Phenanthrene	WB	3	0	8.8	9.6	4.6	0.20
Umatilla River	Semivolatiles	Pyrene	E	3	0	19	20	9.7	0.23
Umatilla River	Semivolatiles	Pyrene	FS	3	0	19	19	9.6	0.10
Umatilla River	Semivolatiles	Pyrene	WB	3	0	18	19	9.2	0.40
Umatilla River	Semivolatiles	Retene	E	3	0	19	20	9.7	0.23
Umatilla River	Semivolatiles	Retene	FS	3	0	19	19	9.6	0.10
Umatilla River	Semivolatiles	Retene	WB	3	0	18	19	9.2	0.40

Appendix D-2: Tributary Summary Statistics
Fall Chinook Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Dioxin/furans	2,3,7,8-TCDD	E	1	0	0.000040	0.000040	0.000020	na
Columbia River	Dioxin/furans	2,3,7,8-TCDD	FS	6	1	0.000010	0.000040	0.000013	0.0000068
Columbia River	Dioxin/furans	2,3,7,8-TCDD	WB	6	0	0.000020	0.000040	0.000013	0.0000041
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDD	E	1	0	0.000040	0.000040	0.000020	na
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	6	0	0.000020	0.000050	0.000014	0.0000066
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	6	0	0.000020	0.000060	0.000019	0.0000074
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDD	E	1	0	0.000010	0.000010	0.0000050	na
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	6	0	0.000010	0.000050	0.000011	0.0000077
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	6	0	0.000010	0.000040	0.000014	0.0000058
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDD	E	1	0	0.000010	0.000010	0.0000050	na
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	6	2	0.000010	0.000050	0.000021	0.000016
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	6	0	0.000010	0.000040	0.000014	0.0000058
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDD	E	1	0	0.000010	0.000010	0.0000050	na
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	6	0	0.000010	0.000050	0.000011	0.0000077
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	6	0	0.000010	0.000040	0.000014	0.0000058
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	E	1	1	0.000050	0.000050	0.000050	na
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	6	5	0.000010	0.000070	0.000033	0.000022
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	6	2	0.000020	0.000060	0.000028	0.000021
Columbia River	Dioxin/furans	OCDD	E	1	1	0.00028	0.00028	0.00028	na
Columbia River	Dioxin/furans	OCDD	FS	6	3	0.000010	0.00015	0.000058	0.000061
Columbia River	Dioxin/furans	OCDD	WB	6	1	0.000020	0.00055	0.00011	0.00022
Columbia River	Dioxin/furans	2,3,7,8-TCDF	E	1	1	0.00043	0.00043	0.00043	na
Columbia River	Dioxin/furans	2,3,7,8-TCDF	FS	6	6	0.00065	0.0014	0.00090	0.00025
Columbia River	Dioxin/furans	2,3,7,8-TCDF	WB	6	6	0.00043	0.0011	0.00075	0.00025
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDF	E	1	0	0.000030	0.000030	0.000015	na
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	6	1	0.000010	0.000080	0.000022	0.000029
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	6	0	0.000020	0.000040	0.000014	0.0000038
Columbia River	Dioxin/furans	2,3,4,7,8-PeCDF	E	1	0	0.000030	0.000030	0.000015	na
Columbia River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	6	2	0.000010	0.00016	0.000043	0.000060
Columbia River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	6	2	0.000030	0.00015	0.000058	0.000064
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	6	0	0.000010	0.000040	0.000012	0.0000068
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	6	0	0.000010	0.000050	0.000014	0.0000074
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	6	0	0.000010	0.000040	0.000012	0.0000068
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	6	0	0.000010	0.000050	0.000014	0.0000074
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	6	0	0.000010	0.000040	0.000012	0.0000068
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	6	0	0.000010	0.000050	0.000014	0.0000074
Columbia River	Dioxin/furans	2,3,4,6,7,8-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
Columbia River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	6	0	0.000010	0.000040	0.000012	0.0000068
Columbia River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	6	0	0.000010	0.000050	0.000014	0.0000074
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	E	1	0	0.000020	0.000020	0.000010	na
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	6	0	0.000010	0.000020	0.0000079	0.0000025
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	6	0	0.000010	0.000030	0.000010	0.0000045
Columbia River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	E	1	0	0.000020	0.000020	0.000010	na
Columbia River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	6	0	0.000010	0.000020	0.0000079	0.0000025
Columbia River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	6	0	0.000010	0.000030	0.000010	0.0000045
Columbia River	Dioxin/furans	OCDF	E	1	0	0.000050	0.000050	0.000025	na
Columbia River	Dioxin/furans	OCDF	FS	6	0	0.000020	0.000070	0.000020	0.0000089
Columbia River	Dioxin/furans	OCDF	WB	6	0	0.000030	0.000090	0.000031	0.000012
Columbia River	Guaiacols/Phenols	4-Chloroguaiacol	E	1	0	960	960	480	na
Columbia River	Guaiacols/Phenols	4-Chloroguaiacol	FS	6	0	880	1,000	480	21
Columbia River	Guaiacols/Phenols	4-Chloroguaiacol	WB	6	0	930	980	480	9.6
Columbia River	Guaiacols/Phenols	3,4-Dichloroguaiacol	E	1	0	960	960	480	na
Columbia River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	6	0	880	1,000	480	21
Columbia River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	6	0	930	980	480	9.6
Columbia River	Guaiacols/Phenols	4,5-Dichloroguaiacol	E	1	0	960	960	480	na
Columbia River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	6	0	880	1,000	480	21
Columbia River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	6	0	930	980	480	9.6
Columbia River	Guaiacols/Phenols	4,6-Dichloroguaiacol	E	1	0	960	960	480	na
Columbia River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	6	0	880	1,000	480	21
Columbia River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	6	0	930	980	480	9.6
Columbia River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	E	1	0	960	960	480	na
Columbia River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	6	0	880	1,000	480	21
Columbia River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	6	0	930	980	480	9.6
Columbia River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	E	1	0	390	390	190	na
Columbia River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	6	0	350	400	190	8.3
Columbia River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	6	0	370	390	190	3.8
Columbia River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	E	1	0	960	960	480	na
Columbia River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	6	0	880	1,000	480	21
Columbia River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	6	0	930	980	480	9.6
Columbia River	Guaiacols/Phenols	Tetrachloroguaiacol	E	1	0	390	390	190	na
Columbia River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	6	0	350	400	190	8.3
Columbia River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	6	0	370	390	190	3.8
Columbia River	Guaiacols/Phenols	2-Chlorophenol	E	1	0	390	390	190	na

Appendix D-2: Tributary Summary Statistics
Fall Chinook Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Guaiacols/Phenols	2-Chlorophenol	FS	6	0	350	400	190	8.3
Columbia River	Guaiacols/Phenols	2-Chlorophenol	WB	6	0	370	390	190	3.8
Columbia River	Guaiacols/Phenols	4-Chloro-3-methylphenol	E	1	0	390	390	190	na
Columbia River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	6	0	350	400	190	8.3
Columbia River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	6	0	370	390	190	3.8
Columbia River	Guaiacols/Phenols	2,4-Dichlorophenol	E	1	0	390	390	190	na
Columbia River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	6	0	350	400	190	8.3
Columbia River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	6	0	370	390	190	3.8
Columbia River	Guaiacols/Phenols	2,4-Dimethylphenol	E	1	0	960	960	480	na
Columbia River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	6	0	880	1,000	480	21
Columbia River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	6	0	930	980	480	9.6
Columbia River	Guaiacols/Phenols	2,4,5-Trichlorophenol	E	1	0	390	390	190	na
Columbia River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	6	0	350	400	190	8.3
Columbia River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	6	0	370	390	190	3.8
Columbia River	Guaiacols/Phenols	2,4,6-Trichlorophenol	E	1	0	390	390	190	na
Columbia River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	6	0	350	400	190	8.3
Columbia River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	6	0	370	390	190	3.8
Columbia River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	E	1	0	390	390	190	na
Columbia River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	6	0	350	400	190	8.3
Columbia River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	6	0	370	390	190	3.8
Columbia River	Guaiacols/Phenols	Pentachlorophenol	E	1	0	390	390	190	na
Columbia River	Guaiacols/Phenols	Pentachlorophenol	FS	6	0	350	400	190	8.3
Columbia River	Guaiacols/Phenols	Pentachlorophenol	WB	6	0	370	390	190	3.8
Columbia River	Guaiacols/Phenols	Phenol	E	1	0	390	390	190	na
Columbia River	Guaiacols/Phenols	Phenol	FS	6	0	350	400	190	8.3
Columbia River	Guaiacols/Phenols	Phenol	WB	6	0	370	390	190	3.8
Columbia River	Metals	Aluminum	E	1	0	1,000	1,000	500	na
Columbia River	Metals	Aluminum	FS	6	2	1,000	1,500	720	340
Columbia River	Metals	Aluminum	WB	6	0	1,000	1,000	500	0.00
Columbia River	Metals	Antimony	E	1	0	50	50	25	na
Columbia River	Metals	Antimony	FS	6	0	50	50	25	0.00
Columbia River	Metals	Antimony	WB	6	0	50	50	25	0.00
Columbia River	Metals	Arsenic	E	1	1	240	240	240	na
Columbia River	Metals	Arsenic	FS	6	6	730	1,100	880	150
Columbia River	Metals	Arsenic	WB	6	6	810	990	890	70
Columbia River	Metals	Barium	E	1	0	200	200	100	na
Columbia River	Metals	Barium	FS	6	0	200	200	100	0.00
Columbia River	Metals	Barium	WB	6	0	200	200	100	0.00
Columbia River	Metals	Beryllium	E	1	0	4.0	4.0	2.0	na
Columbia River	Metals	Beryllium	FS	6	0	4.0	4.0	2.0	0.00
Columbia River	Metals	Beryllium	WB	6	0	4.0	4.0	2.0	0.00
Columbia River	Metals	Cadmium	E	1	0	4.0	4.0	2.0	na
Columbia River	Metals	Cadmium	FS	6	0	4.0	4.0	2.0	0.00
Columbia River	Metals	Cadmium	WB	6	6	4.6	10	6.7	2.1
Columbia River	Metals	Chromium	E	1	0	100	100	50	na
Columbia River	Metals	Chromium	FS	6	0	100	100	50	0.00
Columbia River	Metals	Chromium	WB	6	2	100	150	82	49
Columbia River	Metals	Cobalt	E	1	1	35	35	35	na
Columbia River	Metals	Cobalt	FS	6	6	3.1	3.7	3.4	0.21
Columbia River	Metals	Cobalt	WB	6	6	75	200	140	43
Columbia River	Metals	Copper	E	1	1	5,800	5,800	5,800	na
Columbia River	Metals	Copper	FS	6	6	540	720	600	65
Columbia River	Metals	Copper	WB	6	6	1,100	14,000	5,900	4,400
Columbia River	Metals	Lead	E	1	0	10	10	5.0	na
Columbia River	Metals	Lead	FS	6	0	10	10	5.0	0.00
Columbia River	Metals	Lead	WB	6	6	14	1,200	440	390
Columbia River	Metals	Manganese	E	1	1	960	960	960	na
Columbia River	Metals	Manganese	FS	6	6	73	91	81	7.1
Columbia River	Metals	Manganese	WB	6	6	240	360	310	43
Columbia River	Metals	Mercury	E	1	0	50	50	25	na
Columbia River	Metals	Mercury	FS	6	6	62	150	98	36
Columbia River	Metals	Mercury	WB	6	4	50	200	90	70
Columbia River	Metals	Nickel	E	1	1	54	54	54	na
Columbia River	Metals	Nickel	FS	6	3	30	320	71	120
Columbia River	Metals	Nickel	WB	6	6	63	240	140	64
Columbia River	Metals	Selenium	E	1	1	2,400	2,400	2,400	na
Columbia River	Metals	Selenium	FS	6	6	290	370	320	30
Columbia River	Metals	Selenium	WB	6	5	390	550	440	110
Columbia River	Metals	Silver	E	1	0	100	100	50	na
Columbia River	Metals	Silver	FS	6	0	100	100	50	0.00
Columbia River	Metals	Silver	WB	6	0	100	100	50	0.00
Columbia River	Metals	Thallium	E	1	0	50	50	25	na
Columbia River	Metals	Thallium	FS	6	0	50	50	25	0.00
Columbia River	Metals	Thallium	WB	6	0	50	50	25	0.00
Columbia River	Metals	Vanadium	E	1	1	19	19	19	na
Columbia River	Metals	Vanadium	FS	6	0	10	10	5.0	0.00

Appendix D-2: Tributary Summary Statistics
Fall Chinook Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Metals	Vanadium	WB	6	6	16	27	20	4.6
Columbia River	Metals	Zinc	E	1	1	36,000	36,000	36,000	na
Columbia River	Metals	Zinc	FS	6	6	5,700	6,800	6,300	480
Columbia River	Metals	Zinc	WB	6	6	24,000	34,000	28,000	3,200
Columbia River	PCBs	Aroclor 1016	E	1	0	19	19	9.5	na
Columbia River	PCBs	Aroclor 1016	FS	6	0	19	20	9.9	0.20
Columbia River	PCBs	Aroclor 1016	WB	6	0	19	20	9.8	0.27
Columbia River	PCBs	Aroclor 1221	E	1	0	19	19	9.5	na
Columbia River	PCBs	Aroclor 1221	FS	6	0	19	20	9.9	0.20
Columbia River	PCBs	Aroclor 1221	WB	6	0	19	20	9.8	0.27
Columbia River	PCBs	Aroclor 1232	E	1	0	19	19	9.5	na
Columbia River	PCBs	Aroclor 1232	FS	6	0	19	20	9.9	0.20
Columbia River	PCBs	Aroclor 1232	WB	6	0	19	20	9.8	0.27
Columbia River	PCBs	Aroclor 1242	E	1	0	19	19	9.5	na
Columbia River	PCBs	Aroclor 1242	FS	6	0	19	20	9.9	0.20
Columbia River	PCBs	Aroclor 1242	WB	6	0	19	20	9.8	0.27
Columbia River	PCBs	Aroclor 1248	E	1	0	19	19	9.5	na
Columbia River	PCBs	Aroclor 1248	FS	6	0	19	20	9.9	0.20
Columbia River	PCBs	Aroclor 1248	WB	6	0	19	20	9.8	0.27
Columbia River	PCBs	Aroclor 1254	E	1	1	12	12	12	na
Columbia River	PCBs	Aroclor 1254	FS	6	6	14	35	23	7.5
Columbia River	PCBs	Aroclor 1254	WB	6	6	12	30	21	6.9
Columbia River	PCBs	Aroclor 1260	E	1	0	19	19	9.5	na
Columbia River	PCBs	Aroclor 1260	FS	6	0	19	20	9.9	0.20
Columbia River	PCBs	Aroclor 1260	WB	6	0	19	20	9.8	0.27
Columbia River	PCBs	PCB 077	E	1	1	0.0046	0.0046	0.0046	na
Columbia River	PCBs	PCB 077	FS	6	6	0.0053	0.057	0.025	0.022
Columbia River	PCBs	PCB 077	WB	6	6	0.0055	0.049	0.024	0.020
Columbia River	PCBs	PCB 105	E	1	1	0.11	0.11	0.11	na
Columbia River	PCBs	PCB 105	FS	6	6	0.18	0.63	0.36	0.18
Columbia River	PCBs	PCB 105	WB	6	6	0.12	0.59	0.34	0.23
Columbia River	PCBs	PCB 114	E	1	1	0.0098	0.0098	0.0098	na
Columbia River	PCBs	PCB 114	FS	6	6	0.016	0.045	0.027	0.011
Columbia River	PCBs	PCB 114	WB	6	6	0.013	0.042	0.028	0.015
Columbia River	PCBs	PCB 118	E	1	1	0.25	0.25	0.25	na
Columbia River	PCBs	PCB 118	FS	6	6	0.41	1.3	0.77	0.35
Columbia River	PCBs	PCB 118	WB	6	6	0.29	1.2	0.71	0.43
Columbia River	PCBs	PCB 123	E	1	1	0.0049	0.0049	0.0049	na
Columbia River	PCBs	PCB 123	FS	6	6	0.0080	0.015	0.011	0.0033
Columbia River	PCBs	PCB 123	WB	6	6	0.0061	0.014	0.010	0.0040
Columbia River	PCBs	PCB 126	E	1	0	0.00050	0.00050	0.00025	na
Columbia River	PCBs	PCB 126	FS	6	5	0.00050	0.0036	0.0020	0.0013
Columbia River	PCBs	PCB 126	WB	6	4	0.00050	0.0043	0.0018	0.0017
Columbia River	PCBs	PCB 156	E	1	1	0.012	0.012	0.012	na
Columbia River	PCBs	PCB 156	FS	6	6	0.033	0.073	0.052	0.014
Columbia River	PCBs	PCB 156	WB	6	6	0.021	0.083	0.051	0.031
Columbia River	PCBs	PCB 157	E	1	1	0.0043	0.0043	0.0043	na
Columbia River	PCBs	PCB 157	FS	6	6	0.0093	0.018	0.013	0.0029
Columbia River	PCBs	PCB 157	WB	6	6	0.0057	0.020	0.013	0.0067
Columbia River	PCBs	PCB 167	E	1	1	0.0099	0.0099	0.0099	na
Columbia River	PCBs	PCB 167	FS	6	6	0.022	0.036	0.027	0.0049
Columbia River	PCBs	PCB 167	WB	6	6	0.014	0.036	0.024	0.010
Columbia River	PCBs	PCB 169	E	1	0	0.0010	0.0010	0.00050	na
Columbia River	PCBs	PCB 169	FS	6	0	0.0010	0.0010	0.00050	0.00
Columbia River	PCBs	PCB 169	WB	6	0	0.0010	0.0010	0.00050	0.00
Columbia River	PCBs	PCB 170	E	1	1	0.029	0.029	0.029	na
Columbia River	PCBs	PCB 170	FS	6	6	0.066	0.11	0.083	0.017
Columbia River	PCBs	PCB 170	WB	6	6	0.044	0.11	0.069	0.026
Columbia River	PCBs	PCB 180	E	1	1	0.095	0.095	0.095	na
Columbia River	PCBs	PCB 180	FS	6	6	0.20	0.37	0.27	0.062
Columbia River	PCBs	PCB 180	WB	6	6	0.15	0.35	0.22	0.077
Columbia River	PCBs	PCB 189	E	1	0	0.0010	0.0010	0.00050	na
Columbia River	PCBs	PCB 189	FS	6	6	0.0023	0.0049	0.0033	0.00090
Columbia River	PCBs	PCB 189	WB	6	4	0.0010	0.0043	0.0019	0.0015
Columbia River	Pesticides	Aldrin	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	Aldrin	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Aldrin	WB	6	0	1.9	2.0	0.98	0.027
Columbia River	Pesticides	Alpha-BHC	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	Alpha-BHC	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Alpha-BHC	WB	6	0	1.9	2.0	0.98	0.027
Columbia River	Pesticides	Alpha-Chlordene	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	Alpha-Chlordene	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Alpha-Chlordene	WB	6	0	1.9	2.0	0.98	0.027
Columbia River	Pesticides	Beta-BHC	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	Beta-BHC	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Beta-BHC	WB	6	0	1.9	2.0	0.98	0.027

Appendix D-2: Tributary Summary Statistics
Fall Chinook Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Pesticides	cis-Chlordane (alpha-Chlordane)	E	1	1	1.7	1.7	1.7	na
Columbia River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	6	4	1.2	2.0	1.4	0.36
Columbia River	Pesticides	cis-Nonachlor	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	cis-Nonachlor	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	cis-Nonachlor	WB	6	1	1.2	2.0	1.0	0.093
Columbia River	Pesticides	DDD-o,p'	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	DDD-o,p'	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	DDD-o,p'	WB	6	3	0.96	2.0	1.1	0.22
Columbia River	Pesticides	DDE-o,p'	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	DDE-o,p'	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	DDE-o,p'	WB	6	0	1.9	2.0	0.98	0.027
Columbia River	Pesticides	DDT-o,p'	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	DDT-o,p'	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	DDT-o,p'	WB	6	0	1.9	2.0	0.98	0.027
Columbia River	Pesticides	DDD-p,p'	E	1	1	3.7	3.7	3.7	na
Columbia River	Pesticides	DDD-p,p'	FS	6	6	2.8	5.7	3.6	1.1
Columbia River	Pesticides	DDD-p,p'	WB	6	6	2.8	6.9	4.2	1.8
Columbia River	Pesticides	DDE-p,p'	E	1	1	6.6	6.6	6.6	na
Columbia River	Pesticides	DDE-p,p'	FS	6	6	8.1	14	10	2.2
Columbia River	Pesticides	DDE-p,p'	WB	6	6	5.5	14	8.4	3.0
Columbia River	Pesticides	DDT-p,p'	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	DDT-p,p'	FS	6	3	1.8	4.2	1.8	1.2
Columbia River	Pesticides	DDT-p,p'	WB	6	0	1.9	2.0	0.98	0.027
Columbia River	Pesticides	DDMU	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	DDMU	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	DDMU	WB	6	1	1.4	2.0	1.1	0.17
Columbia River	Pesticides	Delta-BHC	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	Delta-BHC	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Delta-BHC	WB	6	0	1.9	2.0	0.98	0.027
Columbia River	Pesticides	Endosulfan Sulfate	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	Endosulfan Sulfate	FS	6	0	1.9	2.0	0.98	0.029
Columbia River	Pesticides	Endosulfan Sulfate	WB	5	0	1.9	2.0	0.98	0.029
Columbia River	Pesticides	Gamma-Chlordane	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	Gamma-Chlordane	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Gamma-Chlordane	WB	6	0	1.9	2.0	0.98	0.027
Columbia River	Pesticides	gamma-Chlordene	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	gamma-Chlordene	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	gamma-Chlordene	WB	6	0	1.9	2.0	0.98	0.027
Columbia River	Pesticides	Heptachlor	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	Heptachlor	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Heptachlor	WB	6	0	1.9	2.0	0.98	0.027
Columbia River	Pesticides	Heptachlor Epoxide	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	Heptachlor Epoxide	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Heptachlor Epoxide	WB	5	0	1.9	2.0	0.98	0.029
Columbia River	Pesticides	Hexachlorobenzene	E	1	1	4.3	4.3	4.3	na
Columbia River	Pesticides	Hexachlorobenzene	FS	6	6	1.4	2.7	2.2	0.47
Columbia River	Pesticides	Hexachlorobenzene	WB	6	6	2.0	4.5	3.1	0.84
Columbia River	Pesticides	Lindane	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	Lindane	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Lindane	WB	6	0	1.9	2.0	0.98	0.027
Columbia River	Pesticides	Mirex	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	Mirex	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Mirex	WB	6	0	1.9	2.0	0.98	0.027
Columbia River	Pesticides	Oxychlordane	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	Oxychlordane	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Oxychlordane	WB	6	0	1.9	2.0	0.98	0.027
Columbia River	Pesticides	Pentachloroanisol	E	1	0	1.9	1.9	0.95	na
Columbia River	Pesticides	Pentachloroanisol	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Pentachloroanisol	WB	6	0	1.9	2.0	0.98	0.027
Columbia River	Pesticides	Toxaphene	E	1	0	58	58	29	na
Columbia River	Pesticides	Toxaphene	FS	6	0	58	60	30	0.33
Columbia River	Pesticides	Toxaphene	WB	6	0	57	60	29	0.66
Columbia River	Pesticides	trans-Nonachlor	E	1	1	2.9	2.9	2.9	na
Columbia River	Pesticides	trans-Nonachlor	FS	6	6	2.4	4.4	3.6	0.78
Columbia River	Pesticides	trans-Nonachlor	WB	6	6	2.2	4.6	3.2	0.96
Columbia River	Semivolatiles	1,2,4-Trichlorobenzene	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	1,2,4-Trichlorobenzene	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	1,2,4-Trichlorobenzene	WB	6	0	9.3	9.8	4.8	0.10
Columbia River	Semivolatiles	1,2-Diphenylhydrazine	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	1,2-Diphenylhydrazine	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	1,2-Diphenylhydrazine	WB	6	0	9.3	9.8	4.8	0.10
Columbia River	Semivolatiles	2,4-Dinitrotoluene	E	1	0	19	19	9.6	na
Columbia River	Semivolatiles	2,4-Dinitrotoluene	FS	6	0	18	160	43	37
Columbia River	Semivolatiles	2,4-Dinitrotoluene	WB	6	0	19	20	9.5	0.21
Columbia River	Semivolatiles	2,6-Dinitrotoluene	E	1	0	38	38	19	na

Appendix D-2: Tributary Summary Statistics
Fall Chinook Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Semivolatiles	2,6-Dinitrotoluene	FS	6	0	35	40	19	0.83
Columbia River	Semivolatiles	2,6-Dinitrotoluene	WB	6	0	37	39	19	0.41
Columbia River	Semivolatiles	2-Chloronaphthalene	E	1	0	19	19	9.6	na
Columbia River	Semivolatiles	2-Chloronaphthalene	FS	6	0	18	20	9.5	0.42
Columbia River	Semivolatiles	2-Chloronaphthalene	WB	6	0	19	20	9.5	0.21
Columbia River	Semivolatiles	4-Bromophenyl-Phenylether	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	4-Bromophenyl-Phenylether	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	4-Bromophenyl-Phenylether	WB	6	0	9.3	9.8	4.8	0.10
Columbia River	Semivolatiles	4-Chlorophenyl-Phenylether	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	6	0	9.3	9.8	4.8	0.10
Columbia River	Semivolatiles	Acenaphthene	E	1	0	19	19	9.6	na
Columbia River	Semivolatiles	Acenaphthene	FS	6	0	18	20	9.5	0.42
Columbia River	Semivolatiles	Acenaphthene	WB	6	0	19	20	9.5	0.21
Columbia River	Semivolatiles	Acenaphthylene	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	Acenaphthylene	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	Acenaphthylene	WB	6	0	9.3	9.8	4.8	0.10
Columbia River	Semivolatiles	Anthracene	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	Anthracene	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	Anthracene	WB	6	0	9.3	9.8	4.8	0.10
Columbia River	Semivolatiles	Benzene, 1,2-dichloro-	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	Benzene, 1,2-dichloro-	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	Benzene, 1,2-dichloro-	WB	6	0	9.3	9.8	4.8	0.10
Columbia River	Semivolatiles	Benzene, 1,3-dichloro-	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	Benzene, 1,3-dichloro-	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	Benzene, 1,3-dichloro-	WB	6	0	9.3	9.8	4.8	0.10
Columbia River	Semivolatiles	Benzene, 1,4-dichloro-	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	Benzene, 1,4-dichloro-	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	Benzene, 1,4-dichloro-	WB	6	0	9.3	9.8	4.8	0.10
Columbia River	Semivolatiles	Benzo(a)anthracene	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	Benzo(a)anthracene	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	Benzo(a)anthracene	WB	6	0	9.3	9.8	4.8	0.10
Columbia River	Semivolatiles	Benzo(a)pyrene	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	Benzo(a)pyrene	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	Benzo(a)pyrene	WB	6	0	9.3	9.8	4.8	0.10
Columbia River	Semivolatiles	Benzo(g,h,i)perylene	E	1	0	19	19	9.6	na
Columbia River	Semivolatiles	Benzo(g,h,i)perylene	FS	6	0	18	20	9.5	0.42
Columbia River	Semivolatiles	Benzo(g,h,i)perylene	WB	6	0	19	20	9.5	0.21
Columbia River	Semivolatiles	Benzo[b]fluoranthene	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	Benzo[b]fluoranthene	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	Benzo[b]fluoranthene	WB	6	0	9.3	9.8	4.8	0.10
Columbia River	Semivolatiles	Benzo[k]fluoranthene	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	Benzo[k]fluoranthene	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	Benzo[k]fluoranthene	WB	6	0	9.3	9.8	4.8	0.10
Columbia River	Semivolatiles	bis(2-Chloroisopropyl)ether	E	1	0	19	19	9.6	na
Columbia River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	6	0	18	20	9.5	0.42
Columbia River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	6	0	19	20	9.5	0.21
Columbia River	Semivolatiles	Chrysene	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	Chrysene	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	Chrysene	WB	6	0	9.3	9.8	4.8	0.10
Columbia River	Semivolatiles	Dibenz[a,h]anthracene	E	1	0	19	19	9.6	na
Columbia River	Semivolatiles	Dibenz[a,h]anthracene	FS	6	0	18	20	9.5	0.42
Columbia River	Semivolatiles	Dibenz[a,h]anthracene	WB	6	0	19	20	9.5	0.21
Columbia River	Semivolatiles	Dibenzofuran	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	Dibenzofuran	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	Dibenzofuran	WB	6	0	9.3	9.8	4.8	0.10
Columbia River	Semivolatiles	Fluoranthene	E	1	0	19	19	9.6	na
Columbia River	Semivolatiles	Fluoranthene	FS	6	0	18	20	9.5	0.42
Columbia River	Semivolatiles	Fluoranthene	WB	6	0	19	20	9.5	0.21
Columbia River	Semivolatiles	9H-Fluorene	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	9H-Fluorene	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	9H-Fluorene	WB	6	0	9.3	9.8	4.8	0.10
Columbia River	Semivolatiles	Hexachlorobutadiene	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	Hexachlorobutadiene	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	Hexachlorobutadiene	WB	6	0	9.3	9.8	4.8	0.10
Columbia River	Semivolatiles	Hexachloroethane	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	Hexachloroethane	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	Hexachloroethane	WB	6	0	9.3	9.8	4.8	0.10
Columbia River	Semivolatiles	Indeno(1,2,3-cd)pyrene	E	1	0	19	19	9.6	na
Columbia River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	6	0	18	20	9.5	0.42
Columbia River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	6	0	19	20	9.5	0.21
Columbia River	Semivolatiles	Naphthalene	E	1	0	44	44	22	na
Columbia River	Semivolatiles	Naphthalene	FS	6	0	15	30	11	2.7
Columbia River	Semivolatiles	Naphthalene	WB	6	0	12	40	13	5.7
Columbia River	Semivolatiles	Naphthalene, 1-methyl-	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	Naphthalene, 1-methyl-	FS	6	0	8.9	10	4.8	0.21

Appendix D-2: Tributary Summary Statistics
Fall Chinook Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Semivolatiles	Naphthalene, 1-methyl-	WB	6	0	9.3	10	4.8	0.20
Columbia River	Semivolatiles	Naphthalene, 2-methyl-	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	Naphthalene, 2-methyl-	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	Naphthalene, 2-methyl-	WB	6	0	9.3	14	5.1	0.84
Columbia River	Semivolatiles	Nitrobenzene	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	Nitrobenzene	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	Nitrobenzene	WB	6	0	9.3	13	5.1	0.67
Columbia River	Semivolatiles	Phenanthrene	E	1	0	9.6	9.6	4.8	na
Columbia River	Semivolatiles	Phenanthrene	FS	6	0	8.9	10	4.8	0.21
Columbia River	Semivolatiles	Phenanthrene	WB	6	0	9.3	9.8	4.8	0.10
Columbia River	Semivolatiles	Pyrene	E	1	0	19	19	9.6	na
Columbia River	Semivolatiles	Pyrene	FS	6	0	18	20	9.5	0.42
Columbia River	Semivolatiles	Pyrene	WB	6	0	19	20	9.5	0.21
Columbia River	Semivolatiles	Retene	E	1	0	19	19	9.6	na
Columbia River	Semivolatiles	Retene	FS	6	0	18	20	9.5	0.42
Columbia River	Semivolatiles	Retene	WB	6	0	19	20	9.5	0.21
Klickitat River	Dioxin/furans	2,3,7,8-TCDD	FS	3	0	0.000020	0.000040	0.000015	0.000050
Klickitat River	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000020	0.000030	0.000012	0.000029
Klickitat River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	0	0.000030	0.000050	0.000020	0.000050
Klickitat River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.000030	0.000040	0.000018	0.000029
Klickitat River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000010	0.000020	0.0000083	0.000029
Klickitat River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000010	0.000020	0.0000083	0.000029
Klickitat River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	0	0.000010	0.000020	0.0000083	0.000029
Klickitat River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	1	0.000010	0.000020	0.000012	0.000076
Klickitat River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	0	0.000010	0.000020	0.0000083	0.000029
Klickitat River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	0	0.000010	0.000020	0.0000083	0.000029
Klickitat River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	1	0.000020	0.000050	0.000023	0.000023
Klickitat River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	0	0.000030	0.000060	0.000020	0.000087
Klickitat River	Dioxin/furans	OCDD	FS	3	1	0.000020	0.00011	0.000045	0.000056
Klickitat River	Dioxin/furans	OCDD	WB	3	0	0.000030	0.000060	0.000020	0.000087
Klickitat River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00044	0.00080	0.00057	0.00020
Klickitat River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00046	0.00054	0.00051	0.000042
Klickitat River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	0	0.000020	0.000030	0.000012	0.000029
Klickitat River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	1	0.000010	0.000040	0.000020	0.000018
Klickitat River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	1	0.000020	0.000050	0.000025	0.000022
Klickitat River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	2	0.000030	0.000080	0.000052	0.000033
Klickitat River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
Klickitat River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	0	0.000010	0.000030	0.000010	0.000050
Klickitat River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
Klickitat River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	0	0.000010	0.000030	0.000010	0.000050
Klickitat River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
Klickitat River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000030	0.000010	0.000050
Klickitat River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
Klickitat River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	0	0.000010	0.000030	0.000010	0.000050
Klickitat River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000010	0.000030	0.0000083	0.000058
Klickitat River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000010	0.000020	0.0000083	0.000029
Klickitat River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000030	0.0000083	0.000058
Klickitat River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000020	0.0000083	0.000029
Klickitat River	Dioxin/furans	OCDF	FS	3	1	0.000030	0.00013	0.000055	0.000065
Klickitat River	Dioxin/furans	OCDF	WB	3	0	0.000050	0.000090	0.000035	0.000010
Klickitat River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	930	990	480	16
Klickitat River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	930	990	480	15
Klickitat River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	930	990	480	16
Klickitat River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	930	990	480	15
Klickitat River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	930	990	480	16
Klickitat River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	930	990	480	15
Klickitat River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	930	990	480	16
Klickitat River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	930	990	480	15
Klickitat River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	930	990	480	16
Klickitat River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	930	990	480	15
Klickitat River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	370	400	190	6.3
Klickitat River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	370	400	190	6.3
Klickitat River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	930	990	480	16
Klickitat River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	930	990	480	15
Klickitat River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	370	400	190	6.3
Klickitat River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	370	400	190	6.3
Klickitat River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	370	400	190	6.3
Klickitat River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	370	400	190	6.3
Klickitat River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	370	400	190	6.3
Klickitat River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	370	400	190	6.3
Klickitat River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	370	400	190	6.3
Klickitat River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	370	400	190	6.3
Klickitat River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	930	990	480	16
Klickitat River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	930	990	480	15
Klickitat River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	370	400	190	6.3
Klickitat River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	370	400	190	6.3

Appendix D-2: Tributary Summary Statistics
Fall Chinook Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Klickitat River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	370	400	190	6.3
Klickitat River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	370	400	190	6.3
Klickitat River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	370	400	190	6.3
Klickitat River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	370	400	190	6.3
Klickitat River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	370	400	190	6.3
Klickitat River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	370	400	190	6.3
Klickitat River	Guaiacols/Phenols	Phenol	FS	3	0	370	400	190	6.3
Klickitat River	Guaiacols/Phenols	Phenol	WB	3	0	370	400	190	6.3
Klickitat River	Metals	Aluminum	FS	3	1	1,000	1,200	730	400
Klickitat River	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
Klickitat River	Metals	Antimony	FS	3	0	50	50	25	0.00
Klickitat River	Metals	Antimony	WB	3	0	50	50	25	0.00
Klickitat River	Metals	Arsenic	FS	3	3	780	1,100	920	160
Klickitat River	Metals	Arsenic	WB	3	3	910	1,000	960	72
Klickitat River	Metals	Barium	FS	3	0	200	200	100	0.00
Klickitat River	Metals	Barium	WB	3	0	200	200	100	0.00
Klickitat River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Klickitat River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Klickitat River	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
Klickitat River	Metals	Cadmium	WB	3	3	5.0	7.4	6.1	1.2
Klickitat River	Metals	Chromium	FS	3	0	100	100	50	0.00
Klickitat River	Metals	Chromium	WB	3	3	110	170	140	31
Klickitat River	Metals	Cobalt	FS	3	3	2.9	3.8	3.4	0.46
Klickitat River	Metals	Cobalt	WB	3	3	76	160	120	44
Klickitat River	Metals	Copper	FS	3	3	600	710	650	54
Klickitat River	Metals	Copper	WB	3	3	1,600	2,900	2,300	640
Klickitat River	Metals	Lead	FS	3	0	10	10	5.0	0.00
Klickitat River	Metals	Lead	WB	3	3	54	170	120	57
Klickitat River	Metals	Manganese	FS	3	3	72	93	82	11
Klickitat River	Metals	Manganese	WB	3	3	250	390	340	78
Klickitat River	Metals	Mercury	FS	3	2	50	81	58	29
Klickitat River	Metals	Mercury	WB	3	1	50	66	39	24
Klickitat River	Metals	Nickel	FS	3	1	30	51	27	21
Klickitat River	Metals	Nickel	WB	3	3	80	240	140	85
Klickitat River	Metals	Selenium	FS	3	3	380	380	380	0.00
Klickitat River	Metals	Selenium	WB	3	3	490	510	500	11
Klickitat River	Metals	Silver	FS	3	0	100	100	50	0.00
Klickitat River	Metals	Silver	WB	3	0	100	100	50	0.00
Klickitat River	Metals	Thallium	FS	3	0	50	50	25	0.00
Klickitat River	Metals	Thallium	WB	3	0	50	50	25	0.00
Klickitat River	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
Klickitat River	Metals	Vanadium	WB	3	3	20	22	21	1.2
Klickitat River	Metals	Zinc	FS	3	3	5,600	6,400	6,100	440
Klickitat River	Metals	Zinc	WB	3	3	24,000	32,000	27,000	4,200
Klickitat River	PCBs	Aroclor 1016	FS	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1016	WB	3	0	20	20	10	0.00
Klickitat River	PCBs	Aroclor 1221	FS	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1221	WB	3	0	20	20	10	0.00
Klickitat River	PCBs	Aroclor 1232	FS	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1232	WB	3	0	20	20	10	0.00
Klickitat River	PCBs	Aroclor 1242	FS	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1242	WB	3	0	20	20	10	0.00
Klickitat River	PCBs	Aroclor 1248	FS	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1248	WB	3	0	20	20	10	0.00
Klickitat River	PCBs	Aroclor 1254	FS	3	3	11	18	14	3.6
Klickitat River	PCBs	Aroclor 1254	WB	3	3	12	16	15	2.3
Klickitat River	PCBs	Aroclor 1260	FS	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1260	WB	3	0	20	20	10	0.00
Klickitat River	PCBs	PCB 077	FS	3	3	0.0041	0.0054	0.0049	0.00074
Klickitat River	PCBs	PCB 077	WB	3	3	0.0051	0.0068	0.0058	0.00090
Klickitat River	PCBs	PCB 105	FS	3	3	0.12	0.19	0.14	0.044
Klickitat River	PCBs	PCB 105	WB	3	3	0.11	0.16	0.14	0.023
Klickitat River	PCBs	PCB 114	FS	3	3	0.011	0.017	0.013	0.0037
Klickitat River	PCBs	PCB 114	WB	3	3	0.011	0.015	0.014	0.0021
Klickitat River	PCBs	PCB 118	FS	3	3	0.27	0.46	0.34	0.11
Klickitat River	PCBs	PCB 118	WB	3	3	0.27	0.36	0.33	0.050
Klickitat River	PCBs	PCB 123	FS	3	3	0.0052	0.0068	0.0060	0.00080
Klickitat River	PCBs	PCB 123	WB	3	3	0.0050	0.0073	0.0062	0.0012
Klickitat River	PCBs	PCB 126	FS	3	0	0.00050	0.00063	0.00027	0.000038
Klickitat River	PCBs	PCB 126	WB	3	1	0.00050	0.00059	0.00035	0.00013
Klickitat River	PCBs	PCB 156	FS	3	3	0.018	0.031	0.023	0.0071
Klickitat River	PCBs	PCB 156	WB	3	3	0.025	0.033	0.030	0.0041
Klickitat River	PCBs	PCB 157	FS	3	3	0.0041	0.0070	0.0055	0.0015
Klickitat River	PCBs	PCB 157	WB	3	3	0.0071	0.0085	0.0080	0.00079
Klickitat River	PCBs	PCB 167	FS	3	3	0.013	0.020	0.016	0.0041
Klickitat River	PCBs	PCB 167	WB	3	3	0.013	0.018	0.016	0.0025

Appendix D-2: Tributary Summary Statistics
Fall Chinook Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Klickitat River	PCBs	PCB 169	FS	3	0	0.0010	0.0010	0.00050	0.00
Klickitat River	PCBs	PCB 169	WB	3	0	0.0010	0.0010	0.00050	0.00
Klickitat River	PCBs	PCB 170	FS	3	3	0.043	0.068	0.053	0.013
Klickitat River	PCBs	PCB 170	WB	3	3	0.044	0.061	0.055	0.0098
Klickitat River	PCBs	PCB 180	FS	3	3	0.14	0.22	0.18	0.041
Klickitat River	PCBs	PCB 180	WB	3	3	0.15	0.20	0.18	0.026
Klickitat River	PCBs	PCB 189	FS	3	2	0.0010	0.0026	0.0015	0.0010
Klickitat River	PCBs	PCB 189	WB	3	2	0.0018	0.0025	0.0019	0.00088
Klickitat River	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Aldrin	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Alpha-BHC	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Alpha-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Alpha-Chlordane	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Beta-BHC	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	2	1.2	2.0	1.3	0.36
Klickitat River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	2	1.4	2.0	1.3	0.26
Klickitat River	Pesticides	cis-Nonachlor	FS	3	1	1.2	2.0	1.1	0.12
Klickitat River	Pesticides	cis-Nonachlor	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	DDD-o,p'	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	DDD-o,p'	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	DDE-o,p'	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	DDE-o,p'	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	DDT-o,p'	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	DDT-o,p'	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	DDD-p,p'	FS	3	3	1.8	2.6	2.2	0.40
Klickitat River	Pesticides	DDD-p,p'	WB	3	3	2.1	2.8	2.5	0.36
Klickitat River	Pesticides	DDE-p,p'	FS	3	3	4.2	9.1	6.6	2.5
Klickitat River	Pesticides	DDE-p,p'	WB	3	3	4.5	7.3	6.2	1.5
Klickitat River	Pesticides	DDT-p,p'	FS	3	1	2.0	2.7	1.6	0.98
Klickitat River	Pesticides	DDT-p,p'	WB	3	2	2.0	2.2	1.7	0.64
Klickitat River	Pesticides	DDMU	FS	3	2	1.2	2.0	1.2	0.20
Klickitat River	Pesticides	DDMU	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Delta-BHC	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	#DIV/0!	#DIV/0!
Klickitat River	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	#DIV/0!	#DIV/0!
Klickitat River	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Gamma-Chlordane	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	gamma-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	gamma-Chlordane	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Heptachlor	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Heptachlor Epoxide	FS	3	0	0.00	0.00	#DIV/0!	#DIV/0!
Klickitat River	Pesticides	Heptachlor Epoxide	WB	3	0	0.00	0.00	#DIV/0!	#DIV/0!
Klickitat River	Pesticides	Hexachlorobenzene	FS	3	3	2.1	3.4	2.6	0.68
Klickitat River	Pesticides	Hexachlorobenzene	WB	3	3	2.8	3.3	3.0	0.26
Klickitat River	Pesticides	Lindane	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Lindane	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Mirex	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Mirex	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Oxychlordane	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Oxychlordane	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Pentachloroanisole	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Pentachloroanisole	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Toxaphene	FS	3	0	58	60	30	0.58
Klickitat River	Pesticides	Toxaphene	WB	3	0	59	60	30	0.29
Klickitat River	Pesticides	trans-Nonachlor	FS	3	3	2.2	4.1	3.0	0.97
Klickitat River	Pesticides	trans-Nonachlor	WB	3	3	2.2	3.4	2.9	0.61
Klickitat River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	19	20	9.7	0.32
Klickitat River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	37	40	19	0.63
Klickitat River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	37	40	19	0.63
Klickitat River	Semivolatiles	2-Chloronaphthalene	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	2-Chloronaphthalene	WB	3	0	19	20	9.7	0.32
Klickitat River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	Acenaphthene	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	Acenaphthene	WB	3	0	19	20	9.7	0.32

Appendix D-2: Tributary Summary Statistics
Fall Chinook Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Klickitat River	Semivolatiles	Acenaphthylene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Acenaphthylene	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	Anthracene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Anthracene	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Benzo(a)anthracene	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Benzo(a)pyrene	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	19	20	9.7	0.32
Klickitat River	Semivolatiles	Benzo[b]fluoranthene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Benzo[b]fluoranthene	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	19	20	9.7	0.32
Klickitat River	Semivolatiles	Chrysene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Chrysene	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	19	20	9.7	0.32
Klickitat River	Semivolatiles	Dibenzofuran	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Dibenzofuran	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	Fluoranthene	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	Fluoranthene	WB	3	0	19	20	9.7	0.32
Klickitat River	Semivolatiles	9H-Fluorene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	9H-Fluorene	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Hexachlorobutadiene	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	Hexachloroethane	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Hexachloroethane	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	19	20	9.7	0.32
Klickitat River	Semivolatiles	Naphthalene	FS	3	0	26	40	16	3.6
Klickitat River	Semivolatiles	Naphthalene	WB	3	0	28	39	16	2.7
Klickitat River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.7	10	4.9	0.076
Klickitat River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.9	21	7.2	2.8
Klickitat River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	Nitrobenzene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Nitrobenzene	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	Phenanthrene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Phenanthrene	WB	3	0	9.3	9.9	4.8	0.16
Klickitat River	Semivolatiles	Pyrene	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	Pyrene	WB	3	0	19	20	9.7	0.32
Klickitat River	Semivolatiles	Retene	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	Retene	WB	3	0	19	20	9.7	0.32
Umatilla River	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000010	0.000020	0.000012	0.0000076
Umatilla River	Dioxin/furans	2,3,7,8-TCDD	WB	3	1	0.000010	0.000040	0.000018	0.000019
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000010	0.000060	0.000027	0.000029
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.000010	0.000010	0.0000050	0.00
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000010	0.000010	0.0000050	0.00
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	1	0.000010	0.000020	0.000010	0.0000087
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	1	0.000010	0.000060	0.000025	0.000030
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000010	0.000030	0.000018	0.000013
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000010	0.000060	0.000035	0.000028
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	2	0.000010	0.00014	0.000082	0.000069
Umatilla River	Dioxin/furans	OCDD	FS	3	2	0.000010	0.00036	0.00017	0.00018
Umatilla River	Dioxin/furans	OCDD	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
Umatilla River	Dioxin/furans	2,3,7,8-TCDF	FS	3	2	0.000030	0.00076	0.00044	0.00038
Umatilla River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00052	0.0014	0.00089	0.00042
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	0	0.000020	0.000020	0.000010	0.00
Umatilla River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	2	0.000010	0.00012	0.000065	0.000058
Umatilla River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	1	0.000020	0.00010	0.000040	0.000052
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00

Appendix D-2: Tributary Summary Statistics
Fall Chinook Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
Umatilla River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
Umatilla River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
Umatilla River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Umatilla River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
Umatilla River	Dioxin/furans	OCDF	FS	3	0	0.000020	0.000030	0.000013	0.0000029
Umatilla River	Dioxin/furans	OCDF	WB	3	0	0.000020	0.000040	0.000015	0.0000050
Umatilla River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	870	1,000	460	33
Umatilla River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	870	960	460	21
Umatilla River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	870	1,000	460	33
Umatilla River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	870	960	460	21
Umatilla River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	870	1,000	460	33
Umatilla River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	870	960	460	21
Umatilla River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	870	1,000	460	33
Umatilla River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	870	960	460	21
Umatilla River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	870	1,000	460	33
Umatilla River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	870	960	460	21
Umatilla River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	350	400	180	13
Umatilla River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	350	380	180	8.4
Umatilla River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	870	1,000	460	33
Umatilla River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	870	960	460	21
Umatilla River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	350	400	180	13
Umatilla River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	350	380	180	8.4
Umatilla River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	350	400	180	13
Umatilla River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	350	380	180	8.4
Umatilla River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	350	400	180	13
Umatilla River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	350	380	180	8.4
Umatilla River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	350	400	180	13
Umatilla River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	350	380	180	8.4
Umatilla River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	870	1,000	460	33
Umatilla River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	870	960	460	21
Umatilla River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	350	400	180	13
Umatilla River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	350	380	180	8.4
Umatilla River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	350	400	180	13
Umatilla River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	350	380	180	8.4
Umatilla River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	350	400	180	13
Umatilla River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	350	380	180	8.4
Umatilla River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	350	400	180	13
Umatilla River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	350	380	180	8.4
Umatilla River	Guaiacols/Phenols	Phenol	FS	3	0	350	400	180	13
Umatilla River	Guaiacols/Phenols	Phenol	WB	3	0	350	380	180	8.4
Umatilla River	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
Umatilla River	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
Umatilla River	Metals	Antimony	FS	3	0	50	50	25	0.00
Umatilla River	Metals	Antimony	WB	3	0	50	50	25	0.00
Umatilla River	Metals	Arsenic	FS	3	3	530	610	560	42
Umatilla River	Metals	Arsenic	WB	3	3	610	830	710	110
Umatilla River	Metals	Barium	FS	3	0	200	200	100	0.00
Umatilla River	Metals	Barium	WB	3	0	200	200	100	0.00
Umatilla River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Umatilla River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Umatilla River	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
Umatilla River	Metals	Cadmium	WB	3	3	4.7	5.5	5.0	0.46
Umatilla River	Metals	Chromium	FS	3	0	100	100	50	0.00
Umatilla River	Metals	Chromium	WB	3	2	100	180	120	66
Umatilla River	Metals	Cobalt	FS	3	3	51	66	56	8.4
Umatilla River	Metals	Cobalt	WB	3	3	80	220	150	69
Umatilla River	Metals	Copper	FS	3	3	600	640	630	21
Umatilla River	Metals	Copper	WB	3	3	1,100	1,300	1,200	70
Umatilla River	Metals	Lead	FS	3	3	10	16	12	3.2
Umatilla River	Metals	Lead	WB	3	3	11	14	13	1.5
Umatilla River	Metals	Manganese	FS	3	3	73	110	91	17
Umatilla River	Metals	Manganese	WB	3	3	280	350	320	39
Umatilla River	Metals	Mercury	FS	3	3	69	100	79	18
Umatilla River	Metals	Mercury	WB	3	2	50	130	74	53
Umatilla River	Metals	Nickel	FS	3	2	30	220	91	110
Umatilla River	Metals	Nickel	WB	3	3	64	130	98	33
Umatilla River	Metals	Selenium	FS	3	3	280	280	280	0.00
Umatilla River	Metals	Selenium	WB	3	3	380	550	470	86
Umatilla River	Metals	Silver	FS	3	0	100	100	50	0.00
Umatilla River	Metals	Silver	WB	3	0	100	100	50	0.00
Umatilla River	Metals	Thallium	FS	3	0	50	50	25	0.00
Umatilla River	Metals	Thallium	WB	3	0	50	50	25	0.00

Appendix D-2: Tributary Summary Statistics
Fall Chinook Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Metals	Vanadium	FS	3	1	10	11	7.0	3.5
Umatilla River	Metals	Vanadium	WB	3	3	23	47	33	13
Umatilla River	Metals	Zinc	FS	3	3	6,500	7,100	6,900	340
Umatilla River	Metals	Zinc	WB	3	3	24,000	34,000	28,000	4,900
Umatilla River	PCBs	Aroclor 1016	FS	3	0	19	20	9.7	0.29
Umatilla River	PCBs	Aroclor 1016	WB	3	0	19	20	9.8	0.29
Umatilla River	PCBs	Aroclor 1221	FS	3	0	19	20	9.7	0.29
Umatilla River	PCBs	Aroclor 1221	WB	3	0	19	20	9.8	0.29
Umatilla River	PCBs	Aroclor 1232	FS	3	0	19	20	9.7	0.29
Umatilla River	PCBs	Aroclor 1232	WB	3	0	19	20	9.8	0.29
Umatilla River	PCBs	Aroclor 1242	FS	3	0	19	20	9.7	0.29
Umatilla River	PCBs	Aroclor 1242	WB	3	0	19	20	9.8	0.29
Umatilla River	PCBs	Aroclor 1248	FS	3	0	19	20	9.7	0.29
Umatilla River	PCBs	Aroclor 1248	WB	3	0	19	20	9.8	0.29
Umatilla River	PCBs	Aroclor 1254	FS	3	3	8.6	16	12	3.7
Umatilla River	PCBs	Aroclor 1254	WB	3	3	10	47	26	19
Umatilla River	PCBs	Aroclor 1260	FS	3	0	19	20	9.7	0.29
Umatilla River	PCBs	Aroclor 1260	WB	3	0	19	20	9.8	0.29
Umatilla River	PCBs	PCB 077	FS	3	3	0.0041	0.0068	0.0058	0.0014
Umatilla River	PCBs	PCB 077	WB	3	3	0.0077	0.016	0.011	0.0043
Umatilla River	PCBs	PCB 105	FS	3	3	0.080	0.22	0.15	0.068
Umatilla River	PCBs	PCB 105	WB	3	3	0.12	0.66	0.33	0.28
Umatilla River	PCBs	PCB 114	FS	3	3	0.0083	0.020	0.015	0.0062
Umatilla River	PCBs	PCB 114	WB	3	3	0.012	0.053	0.029	0.022
Umatilla River	PCBs	PCB 118	FS	3	3	0.20	0.48	0.35	0.14
Umatilla River	PCBs	PCB 118	WB	3	3	0.28	1.5	0.75	0.63
Umatilla River	PCBs	PCB 123	FS	3	3	0.0033	0.0080	0.0060	0.0024
Umatilla River	PCBs	PCB 123	WB	3	3	0.0054	0.012	0.0089	0.0033
Umatilla River	PCBs	PCB 126	FS	3	2	0.00050	0.0017	0.00093	0.00072
Umatilla River	PCBs	PCB 126	WB	3	2	0.00050	0.0047	0.0024	0.0022
Umatilla River	PCBs	PCB 156	FS	3	3	0.016	0.045	0.029	0.015
Umatilla River	PCBs	PCB 156	WB	3	3	0.019	0.20	0.085	0.096
Umatilla River	PCBs	PCB 157	FS	3	3	0.0041	0.012	0.0084	0.0039
Umatilla River	PCBs	PCB 157	WB	3	3	0.0053	0.045	0.020	0.021
Umatilla River	PCBs	PCB 167	FS	3	3	0.010	0.025	0.017	0.0075
Umatilla River	PCBs	PCB 167	WB	3	3	0.013	0.078	0.038	0.035
Umatilla River	PCBs	PCB 169	FS	3	0	0.0010	0.0010	0.00050	0.00
Umatilla River	PCBs	PCB 169	WB	3	0	0.0010	0.0012	0.00054	0.000061
Umatilla River	PCBs	PCB 170	FS	3	3	0.038	0.11	0.074	0.036
Umatilla River	PCBs	PCB 170	WB	3	3	0.047	0.35	0.16	0.17
Umatilla River	PCBs	PCB 180	FS	3	3	0.12	0.35	0.23	0.11
Umatilla River	PCBs	PCB 180	WB	3	3	0.14	1.2	0.53	0.55
Umatilla River	PCBs	PCB 189	FS	3	2	0.0010	0.0041	0.0024	0.0018
Umatilla River	PCBs	PCB 189	WB	3	3	0.0017	0.014	0.0064	0.0068
Umatilla River	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.97	0.029
Umatilla River	Pesticides	Aldrin	WB	3	0	1.9	2.0	0.98	0.029
Umatilla River	Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.97	0.029
Umatilla River	Pesticides	Alpha-BHC	WB	3	0	1.9	2.0	0.98	0.029
Umatilla River	Pesticides	Alpha-Chlordane	FS	3	0	1.9	2.0	0.97	0.029
Umatilla River	Pesticides	Alpha-Chlordane	WB	3	0	1.9	2.0	0.98	0.029
Umatilla River	Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.97	0.029
Umatilla River	Pesticides	Beta-BHC	WB	3	0	1.9	2.0	0.98	0.029
Umatilla River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.9	2.0	0.97	0.029
Umatilla River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	1	1.9	2.3	1.4	0.77
Umatilla River	Pesticides	cis-Nonachlor	FS	3	0	1.9	2.0	0.97	0.029
Umatilla River	Pesticides	cis-Nonachlor	WB	3	1	1.3	2.0	1.1	0.19
Umatilla River	Pesticides	DDD-o,p'	FS	3	0	1.9	2.0	0.97	0.029
Umatilla River	Pesticides	DDD-o,p'	WB	3	1	1.2	2.0	1.1	0.13
Umatilla River	Pesticides	DDE-o,p'	FS	3	0	1.9	2.0	0.97	0.029
Umatilla River	Pesticides	DDE-o,p'	WB	3	0	1.9	2.0	0.98	0.029
Umatilla River	Pesticides	DDT-o,p'	FS	3	0	1.9	2.0	0.97	0.029
Umatilla River	Pesticides	DDT-o,p'	WB	3	0	1.9	2.0	0.98	0.029
Umatilla River	Pesticides	DDD-p,p'	FS	3	3	2.4	3.3	2.7	0.49
Umatilla River	Pesticides	DDD-p,p'	WB	3	3	1.4	2.9	2.2	0.75
Umatilla River	Pesticides	DDE-p,p'	FS	3	3	4.2	12	8.2	3.9
Umatilla River	Pesticides	DDE-p,p'	WB	3	3	8.4	53	26	24
Umatilla River	Pesticides	DDT-p,p'	FS	3	2	1.9	3.1	2.2	1.1
Umatilla River	Pesticides	DDT-p,p'	WB	3	2	2.0	3.5	2.6	1.4
Umatilla River	Pesticides	DDMU	FS	3	0	1.9	2.0	0.97	0.029
Umatilla River	Pesticides	DDMU	WB	3	1	1.9	2.4	1.5	0.82
Umatilla River	Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.97	0.029
Umatilla River	Pesticides	Delta-BHC	WB	3	0	1.9	2.0	0.98	0.029
Umatilla River	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	#DIV/0!	#DIV/0!
Umatilla River	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	#DIV/0!	#DIV/0!
Umatilla River	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.0	0.97	0.029
Umatilla River	Pesticides	Gamma-Chlordane	WB	3	0	1.9	2.0	0.98	0.029

Appendix D-2: Tributary Summary Statistics
Fall Chinook Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Pesticides	gamma-Chlordene	FS	3	0	1.9	2.0	0.97	0.029
Umatilla River	Pesticides	gamma-Chlordene	WB	3	0	1.9	2.0	0.98	0.029
Umatilla River	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.97	0.029
Umatilla River	Pesticides	Heptachlor	WB	3	0	1.9	2.0	0.98	0.029
Umatilla River	Pesticides	Heptachlor Epoxide	FS	3	0	1.9	2.0	0.97	0.029
Umatilla River	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	2.0	0.98	0.029
Umatilla River	Pesticides	Hexachlorobenzene	FS	3	3	1.1	1.8	1.5	0.35
Umatilla River	Pesticides	Hexachlorobenzene	WB	3	3	3.1	3.5	3.3	0.21
Umatilla River	Pesticides	Lindane	FS	3	0	1.9	2.0	0.97	0.029
Umatilla River	Pesticides	Lindane	WB	3	0	1.9	2.0	0.98	0.029
Umatilla River	Pesticides	Mirex	FS	3	0	1.9	2.0	0.97	0.029
Umatilla River	Pesticides	Mirex	WB	3	0	1.9	2.0	0.98	0.029
Umatilla River	Pesticides	Oxychlordane	FS	3	0	1.9	2.0	0.97	0.029
Umatilla River	Pesticides	Oxychlordane	WB	3	0	1.9	2.0	0.98	0.029
Umatilla River	Pesticides	Pentachloroanisol	FS	3	0	1.9	2.0	0.97	0.029
Umatilla River	Pesticides	Pentachloroanisol	WB	3	0	1.9	2.0	0.98	0.029
Umatilla River	Pesticides	Toxaphene	FS	3	0	57	59	29	0.58
Umatilla River	Pesticides	Toxaphene	WB	3	0	58	59	29	0.29
Umatilla River	Pesticides	trans-Nonachlor	FS	3	2	1.9	3.1	2.1	1.1
Umatilla River	Pesticides	trans-Nonachlor	WB	3	3	2.0	6.5	4.3	2.3
Umatilla River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	140	160	74	5.2
Umatilla River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	140	150	73	3.5
Umatilla River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	35	40	18	1.3
Umatilla River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	35	38	18	0.84
Umatilla River	Semivolatiles	2-Chloronaphthalene	FS	3	0	17	20	9.2	0.65
Umatilla River	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	19	9.1	0.43
Umatilla River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	Acenaphthene	FS	3	0	17	20	9.2	0.65
Umatilla River	Semivolatiles	Acenaphthene	WB	3	0	18	19	9.1	0.43
Umatilla River	Semivolatiles	Acenaphthylene	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	Acenaphthylene	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	Anthracene	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	Anthracene	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	Benzo(a)anthracene	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	Benzo(a)pyrene	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	17	20	9.2	0.65
Umatilla River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	19	9.1	0.43
Umatilla River	Semivolatiles	Benzo[b]fluoranthene	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	Benzo[b]fluoranthene	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	17	20	9.2	0.65
Umatilla River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	19	9.1	0.43
Umatilla River	Semivolatiles	Chrysene	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	Chrysene	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	17	20	9.2	0.65
Umatilla River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	19	9.1	0.43
Umatilla River	Semivolatiles	Dibenzofuran	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	Dibenzofuran	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	Fluoranthene	FS	3	0	17	20	9.2	0.65
Umatilla River	Semivolatiles	Fluoranthene	WB	3	0	18	19	9.1	0.43
Umatilla River	Semivolatiles	9H-Fluorene	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	9H-Fluorene	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	Hexachlorobutadiene	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	Hexachloroethane	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	Hexachloroethane	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	17	20	9.2	0.65
Umatilla River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	19	9.1	0.43
Umatilla River	Semivolatiles	Naphthalene	FS	3	0	13	22	8.1	2.4
Umatilla River	Semivolatiles	Naphthalene	WB	3	0	19	24	11	1.2

Appendix D-2: Tributary Summary Statistics
Fall Chinook Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	Nitrobenzene	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	Nitrobenzene	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	Phenanthrene	FS	3	0	8.7	10	4.6	0.34
Umatilla River	Semivolatiles	Phenanthrene	WB	3	0	8.7	9.6	4.6	0.23
Umatilla River	Semivolatiles	Pyrene	FS	3	0	17	20	9.2	0.65
Umatilla River	Semivolatiles	Pyrene	WB	3	0	18	19	9.1	0.43
Umatilla River	Semivolatiles	Retene	FS	3	0	17	20	9.2	0.65
Umatilla River	Semivolatiles	Retene	WB	3	0	18	19	9.1	0.43
Yakima River	Dioxin/furans	2,3,7,8-TCDD	FS	3	0	0.000030	0.000050	0.000020	0.0000050
Yakima River	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000030	0.000060	0.000020	0.0000087
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000060	0.00011	0.000057	0.000046
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	2	0.000050	0.000090	0.000065	0.000035
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000030	0.000060	0.000024	0.0000080
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000020	0.000040	0.000013	0.0000058
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	0	0.000030	0.000060	0.000024	0.0000080
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000020	0.000070	0.000047	0.000032
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	0	0.000030	0.000060	0.000024	0.0000080
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	0	0.000020	0.000040	0.000013	0.0000058
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000020	0.00013	0.000073	0.000060
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	2	0.000030	0.00012	0.000082	0.000058
Yakima River	Dioxin/furans	OCDD	FS	3	2	0.000060	0.00042	0.00021	0.00020
Yakima River	Dioxin/furans	OCDD	WB	3	2	0.000040	0.00064	0.00030	0.00031
Yakima River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00049	0.00067	0.00060	0.000099
Yakima River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00072	0.0011	0.00088	0.00019
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	0	0.000030	0.000040	0.000018	0.0000029
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	0	0.000030	0.000040	0.000017	0.0000029
Yakima River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	0	0.000030	0.000040	0.000018	0.0000029
Yakima River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	0	0.000030	0.000040	0.000017	0.0000029
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000040	0.000060	0.000023	0.0000058
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	0	0.000020	0.000030	0.000012	0.0000029
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	0	0.000040	0.000060	0.000023	0.0000058
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	0	0.000020	0.000030	0.000012	0.0000029
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000040	0.000060	0.000023	0.0000058
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000020	0.000030	0.000012	0.0000029
Yakima River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000040	0.000060	0.000023	0.0000058
Yakima River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	0	0.000020	0.000030	0.000012	0.0000029
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000020	0.000050	0.000017	0.0000076
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	1	0.000020	0.00012	0.000048	0.000062
Yakima River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000020	0.000050	0.000017	0.0000076
Yakima River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000020	0.000030	0.000012	0.0000029
Yakima River	Dioxin/furans	OCDF	FS	3	0	0.000070	0.00017	0.000056	0.000024
Yakima River	Dioxin/furans	OCDF	WB	3	0	0.000060	0.00010	0.000037	0.000012
Yakima River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	930	950	470	4.6
Yakima River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	880	990	460	29
Yakima River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	930	950	470	4.6
Yakima River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	880	990	460	29
Yakima River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	930	950	470	4.6
Yakima River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	880	990	460	29
Yakima River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	930	950	470	4.6
Yakima River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	880	990	460	29
Yakima River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	930	950	470	4.6
Yakima River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	880	990	460	29
Yakima River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	370	380	190	1.8
Yakima River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	350	390	180	12
Yakima River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	930	950	470	4.6
Yakima River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	880	990	460	29
Yakima River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	370	380	190	1.8
Yakima River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	350	390	180	12
Yakima River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	370	380	190	1.8
Yakima River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	350	390	180	12
Yakima River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	370	380	190	1.8
Yakima River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	350	390	180	12
Yakima River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	370	380	190	1.8
Yakima River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	350	390	180	12
Yakima River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	930	950	470	4.6
Yakima River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	880	990	460	29
Yakima River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	370	380	190	1.8
Yakima River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	350	390	180	12
Yakima River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	370	380	190	1.8
Yakima River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	350	390	180	12
Yakima River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	370	380	190	1.8
Yakima River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	350	390	180	12

Appendix D-2: Tributary Summary Statistics
Fall Chinook Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	370	380	190	1.8
Yakima River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	350	390	180	12
Yakima River	Guaiacols/Phenols	Phenol	FS	3	0	370	450	200	22
Yakima River	Guaiacols/Phenols	Phenol	WB	3	0	350	390	180	12
Yakima River	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
Yakima River	Metals	Aluminum	WB	3	1	630	1,000	540	75
Yakima River	Metals	Antimony	FS	3	0	50	50	25	0.00
Yakima River	Metals	Antimony	WB	3	0	50	50	25	0.00
Yakima River	Metals	Arsenic	FS	3	3	750	850	810	56
Yakima River	Metals	Arsenic	WB	3	3	770	860	820	47
Yakima River	Metals	Barium	FS	3	2	200	340	260	140
Yakima River	Metals	Barium	WB	3	1	200	250	150	87
Yakima River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Yakima River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Yakima River	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
Yakima River	Metals	Cadmium	WB	3	3	5.4	7.2	6.0	1.0
Yakima River	Metals	Chromium	FS	3	2	100	300	160	130
Yakima River	Metals	Chromium	WB	3	2	100	140	100	46
Yakima River	Metals	Cobalt	FS	3	3	47	400	170	200
Yakima River	Metals	Cobalt	WB	3	3	89	170	130	41
Yakima River	Metals	Copper	FS	3	3	690	760	730	34
Yakima River	Metals	Copper	WB	3	3	1,000	3,500	1,900	1,300
Yakima River	Metals	Lead	FS	3	1	10	11	7.0	3.5
Yakima River	Metals	Lead	WB	3	3	19	200	84	100
Yakima River	Metals	Manganese	FS	3	3	92	110	100	8.5
Yakima River	Metals	Manganese	WB	3	3	250	340	310	50
Yakima River	Metals	Mercury	FS	3	3	72	98	85	13
Yakima River	Metals	Mercury	WB	3	2	50	190	92	86
Yakima River	Metals	Nickel	FS	3	3	76	140	120	35
Yakima River	Metals	Nickel	WB	3	3	140	140	140	4.0
Yakima River	Metals	Selenium	FS	3	3	330	380	360	29
Yakima River	Metals	Selenium	WB	3	3	430	570	480	76
Yakima River	Metals	Silver	FS	3	0	100	100	50	0.00
Yakima River	Metals	Silver	WB	3	0	100	100	50	0.00
Yakima River	Metals	Thallium	FS	3	0	50	50	25	0.00
Yakima River	Metals	Thallium	WB	3	0	50	50	25	0.00
Yakima River	Metals	Vanadium	FS	3	1	10	11	6.2	2.0
Yakima River	Metals	Vanadium	WB	3	3	20	28	25	4.2
Yakima River	Metals	Zinc	FS	3	3	7,900	8,000	8,000	53
Yakima River	Metals	Zinc	WB	3	3	21,000	25,000	23,000	1,900
Yakima River	PCBs	Aroclor 1016	FS	3	0	20	20	9.9	0.14
Yakima River	PCBs	Aroclor 1016	WB	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1221	FS	3	0	20	20	9.9	0.14
Yakima River	PCBs	Aroclor 1221	WB	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1232	FS	3	0	20	20	9.9	0.14
Yakima River	PCBs	Aroclor 1232	WB	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1242	FS	3	0	20	20	9.9	0.14
Yakima River	PCBs	Aroclor 1242	WB	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1248	FS	3	0	20	20	9.9	0.14
Yakima River	PCBs	Aroclor 1248	WB	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1254	FS	3	3	14	17	15	1.4
Yakima River	PCBs	Aroclor 1254	WB	3	3	15	25	19	5.5
Yakima River	PCBs	Aroclor 1260	FS	3	0	20	20	9.9	0.14
Yakima River	PCBs	Aroclor 1260	WB	3	0	19	19	9.5	0.00
Yakima River	PCBs	PCB 077	FS	3	3	0.0073	0.0086	0.0078	0.00072
Yakima River	PCBs	PCB 077	WB	3	3	0.0091	0.0097	0.0094	0.00030
Yakima River	PCBs	PCB 105	FS	3	3	0.17	0.24	0.20	0.034
Yakima River	PCBs	PCB 105	WB	3	3	0.20	0.34	0.25	0.078
Yakima River	PCBs	PCB 114	FS	3	3	0.017	0.021	0.019	0.0023
Yakima River	PCBs	PCB 114	WB	3	3	0.018	0.031	0.022	0.0072
Yakima River	PCBs	PCB 118	FS	3	3	0.41	0.51	0.46	0.054
Yakima River	PCBs	PCB 118	WB	3	3	0.46	0.74	0.56	0.16
Yakima River	PCBs	PCB 123	FS	3	3	0.0058	0.0076	0.0066	0.00094
Yakima River	PCBs	PCB 123	WB	3	3	0.0078	0.011	0.0090	0.0015
Yakima River	PCBs	PCB 126	FS	3	3	0.0017	0.0020	0.0018	0.00014
Yakima River	PCBs	PCB 126	WB	3	2	0.00066	0.0025	0.0017	0.0012
Yakima River	PCBs	PCB 156	FS	3	3	0.039	0.056	0.046	0.0087
Yakima River	PCBs	PCB 156	WB	3	3	0.039	0.083	0.054	0.025
Yakima River	PCBs	PCB 157	FS	3	3	0.0099	0.014	0.011	0.0022
Yakima River	PCBs	PCB 157	WB	3	3	0.011	0.024	0.015	0.0072
Yakima River	PCBs	PCB 167	FS	3	3	0.023	0.027	0.025	0.0018
Yakima River	PCBs	PCB 167	WB	3	3	0.023	0.038	0.028	0.0081
Yakima River	PCBs	PCB 169	FS	3	0	0.0010	0.0010	0.00050	0.00
Yakima River	PCBs	PCB 169	WB	3	0	0.0010	0.0010	0.00050	0.00
Yakima River	PCBs	PCB 170	FS	3	3	0.091	0.13	0.11	0.018
Yakima River	PCBs	PCB 170	WB	3	3	0.080	0.18	0.12	0.056

Appendix D-2: Tributary Summary Statistics
Fall Chinook Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	PCBs	PCB 180	FS	3	3	0.30	0.42	0.35	0.064
Yakima River	PCBs	PCB 180	WB	3	3	0.26	0.57	0.37	0.17
Yakima River	PCBs	PCB 189	FS	3	3	0.0035	0.0052	0.0041	0.00090
Yakima River	PCBs	PCB 189	WB	3	2	0.0010	0.0068	0.0036	0.0031
Yakima River	Pesticides	Aldrin	FS	3	0	2.0	2.0	0.99	0.014
Yakima River	Pesticides	Aldrin	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Alpha-BHC	FS	3	0	2.0	2.0	0.99	0.014
Yakima River	Pesticides	Alpha-BHC	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Alpha-Chlordene	FS	3	0	2.0	2.0	0.99	0.014
Yakima River	Pesticides	Alpha-Chlordene	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Beta-BHC	FS	3	0	2.0	2.0	0.99	0.014
Yakima River	Pesticides	Beta-BHC	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	2.0	2.0	0.99	0.014
Yakima River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	cis-Nonachlor	FS	3	0	2.0	2.0	0.99	0.014
Yakima River	Pesticides	cis-Nonachlor	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	DDD-o,p'	FS	3	0	2.0	2.0	0.99	0.014
Yakima River	Pesticides	DDD-o,p'	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	DDE-o,p'	FS	3	0	2.0	2.0	0.99	0.014
Yakima River	Pesticides	DDE-o,p'	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	DDT-o,p'	FS	3	0	2.0	2.0	0.99	0.014
Yakima River	Pesticides	DDT-o,p'	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	DDD-p,p'	FS	3	2	2.0	6.1	4.2	2.8
Yakima River	Pesticides	DDD-p,p'	WB	3	3	5.7	8.2	6.8	1.3
Yakima River	Pesticides	DDE-p,p'	FS	3	3	23	26	24	1.4
Yakima River	Pesticides	DDE-p,p'	WB	3	3	25	28	26	1.5
Yakima River	Pesticides	DDT-p,p'	FS	3	3	3.2	6.5	5.2	1.7
Yakima River	Pesticides	DDT-p,p'	WB	3	3	6.1	7.7	7.0	0.81
Yakima River	Pesticides	DDMU	FS	3	0	2.0	2.0	0.99	0.014
Yakima River	Pesticides	DDMU	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Delta-BHC	FS	3	0	2.0	2.0	0.99	0.014
Yakima River	Pesticides	Delta-BHC	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	0.00	na
Yakima River	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	0.00	na
Yakima River	Pesticides	Gamma-Chlordane	FS	3	0	2.0	2.0	0.99	0.014
Yakima River	Pesticides	Gamma-Chlordane	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	gamma-Chlordene	FS	3	0	2.0	2.0	0.99	0.014
Yakima River	Pesticides	gamma-Chlordene	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Heptachlor	FS	3	0	2.0	2.0	0.99	0.014
Yakima River	Pesticides	Heptachlor	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Heptachlor Epoxide	FS	3	0	2.0	2.0	0.99	0.014
Yakima River	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Hexachlorobenzene	FS	3	3	1.7	2.0	1.8	0.18
Yakima River	Pesticides	Hexachlorobenzene	WB	3	3	2.6	2.9	2.8	0.15
Yakima River	Pesticides	Lindane	FS	3	0	2.0	2.0	0.99	0.014
Yakima River	Pesticides	Lindane	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Mirex	FS	3	0	2.0	2.0	0.99	0.014
Yakima River	Pesticides	Mirex	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Oxychlordane	FS	3	0	2.0	2.0	0.99	0.014
Yakima River	Pesticides	Oxychlordane	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Pentachloroanisol	FS	3	0	2.0	2.0	0.99	0.014
Yakima River	Pesticides	Pentachloroanisol	WB	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Toxaphene	FS	3	0	59	60	30	0.38
Yakima River	Pesticides	Toxaphene	WB	3	0	56	58	29	0.50
Yakima River	Pesticides	trans-Nonachlor	FS	3	3	2.2	2.7	2.4	0.25
Yakima River	Pesticides	trans-Nonachlor	WB	3	3	3.0	4.4	3.7	0.70
Yakima River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	150	150	76	0.58
Yakima River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	140	160	74	4.7
Yakima River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	37	38	19	0.18
Yakima River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	35	39	18	1.2
Yakima River	Semivolatiles	2-Chloronaphthalene	FS	3	0	19	19	9.5	0.087
Yakima River	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	20	9.2	0.58
Yakima River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	Acenaphthene	FS	3	0	19	19	9.5	0.087
Yakima River	Semivolatiles	Acenaphthene	WB	3	0	18	20	9.2	0.58
Yakima River	Semivolatiles	Acenaphthylene	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	Acenaphthylene	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	Anthracene	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	Anthracene	WB	3	0	8.8	9.9	4.6	0.29

Appendix D-2: Tributary Summary Statistics
Fall Chinook Salmon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	19	19	9.5	0.087
Yakima River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	20	9.2	0.58
Yakima River	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	19	19	9.5	0.087
Yakima River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	20	9.2	0.58
Yakima River	Semivolatiles	Chrysene	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	Chrysene	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	19	19	9.5	0.087
Yakima River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	20	9.2	0.58
Yakima River	Semivolatiles	Dibenzofuran	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	Dibenzofuran	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	Fluoranthene	FS	3	0	19	19	9.5	0.087
Yakima River	Semivolatiles	Fluoranthene	WB	3	0	18	20	9.2	0.58
Yakima River	Semivolatiles	9H-Fluorene	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	9H-Fluorene	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	Hexachloroethane	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	Hexachloroethane	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	19	19	9.5	0.087
Yakima River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	20	9.2	0.58
Yakima River	Semivolatiles	Naphthalene	FS	3	0	18	19	9.2	0.18
Yakima River	Semivolatiles	Naphthalene	WB	3	0	20	20	10	0.13
Yakima River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	Nitrobenzene	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	Nitrobenzene	WB	3	0	8.8	9.9	4.6	0.29
Yakima River	Semivolatiles	Phenanthrene	FS	3	0	9.3	9.5	4.7	0.058
Yakima River	Semivolatiles	Phenanthrene	WB	3	0	9.0	11	4.9	0.43
Yakima River	Semivolatiles	Pyrene	FS	3	0	19	19	9.5	0.087
Yakima River	Semivolatiles	Pyrene	WB	3	0	18	20	9.2	0.58
Yakima River	Semivolatiles	Retene	FS	3	0	19	19	9.5	0.087
Yakima River	Semivolatiles	Retene	WB	3	0	18	20	9.2	0.58

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Grand Ronde River	Dioxin/furans	2,3,7,8-TCDD	E	3	1	0.000010	0.000040	0.000022	0.000018
Grand Ronde River	Dioxin/furans	2,3,7,8-TCDD	FS	3	0	0.000010	0.000020	0.0000083	0.0000029
Grand Ronde River	Dioxin/furans	2,3,7,8-TCDD	WB	3	2	0.000010	0.000040	0.000028	0.000020
Grand Ronde River	Dioxin/furans	1,2,3,7,8-PeCDD	E	3	1	0.000010	0.000060	0.000028	0.000023
Grand Ronde River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	3	0.000055	0.00012	0.000083	0.000035
Grand Ronde River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.000020	0.000020	0.000010	0.00
Grand Ronde River	Dioxin/furans	1,2,3,4,7,8-HxCDD	E	3	1	0.000010	0.000060	0.000015	0.000013
Grand Ronde River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	3	0.000015	0.000030	0.000021	0.0000088
Grand Ronde River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
Grand Ronde River	Dioxin/furans	1,2,3,6,7,8-HxCDD	E	3	1	0.000010	0.000060	0.000025	0.000018
Grand Ronde River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	2	0.000010	0.000075	0.000050	0.000039
Grand Ronde River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000010	0.000070	0.000045	0.000035
Grand Ronde River	Dioxin/furans	1,2,3,7,8,9-HxCDD	E	3	1	0.000010	0.000060	0.000025	0.000018
Grand Ronde River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	3	0.000025	0.000040	0.000031	0.0000088
Grand Ronde River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000010	0.000050	0.000035	0.000046
Grand Ronde River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	E	3	2	0.000010	0.00011	0.000068	0.000056
Grand Ronde River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.000055	0.00011	0.000087	0.000032
Grand Ronde River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00010	0.00017	0.00013	0.000038
Grand Ronde River	Dioxin/furans	OCDD	E	3	3	0.00031	0.00057	0.00043	0.00013
Grand Ronde River	Dioxin/furans	OCDD	FS	3	3	0.00014	0.00030	0.00020	0.000088
Grand Ronde River	Dioxin/furans	OCDD	WB	3	1	0.000010	0.00029	0.00010	0.00016
Grand Ronde River	Dioxin/furans	2,3,7,8-TCDF	E	3	3	0.00057	0.00065	0.00061	0.000040
Grand Ronde River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00064	0.00070	0.00067	0.000033
Grand Ronde River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00062	0.00080	0.00072	0.000093
Grand Ronde River	Dioxin/furans	1,2,3,7,8-PeCDF	E	3	1	0.000020	0.000080	0.000037	0.000025
Grand Ronde River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.00012	0.00018	0.00015	0.000031
Grand Ronde River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	2	0.000010	0.00012	0.000078	0.000064
Grand Ronde River	Dioxin/furans	2,3,4,7,8-PeCDF	E	3	1	0.000020	0.00010	0.000050	0.000046
Grand Ronde River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00015	0.00017	0.00016	0.000012
Grand Ronde River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00018	0.00021	0.00020	0.000017
Grand Ronde River	Dioxin/furans	1,2,3,4,7,8-HxCDF	E	3	0	0.000010	0.00019	0.000037	0.000051
Grand Ronde River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	3	0.000030	0.000040	0.000033	0.0000058
Grand Ronde River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	2	0.000020	0.000040	0.000023	0.000015
Grand Ronde River	Dioxin/furans	1,2,3,6,7,8-HxCDF	E	3	1	0.000020	0.00019	0.000042	0.000046
Grand Ronde River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000030	0.000050	0.000037	0.000012
Grand Ronde River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
Grand Ronde River	Dioxin/furans	1,2,3,7,8,9-HxCDF	E	3	0	0.000010	0.00019	0.000037	0.000051
Grand Ronde River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.00010	0.0000050	0.00
Grand Ronde River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
Grand Ronde River	Dioxin/furans	2,3,4,6,7,8-HxCDF	E	3	1	0.000020	0.00019	0.000045	0.000044
Grand Ronde River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	2	0.000010	0.000060	0.000036	0.000028
Grand Ronde River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	1	0.000020	0.000030	0.000017	0.000012
Grand Ronde River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	E	3	1	0.000020	0.000090	0.000035	0.000022
Grand Ronde River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000010	0.000040	0.000020	0.000018
Grand Ronde River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	1	0.000020	0.000030	0.000017	0.000012
Grand Ronde River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	E	3	0	0.000010	0.000090	0.000020	0.000022
Grand Ronde River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	1	0.000010	0.000015	0.0000075	0.0000025
Grand Ronde River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
Grand Ronde River	Dioxin/furans	OCDF	E	3	1	0.000040	0.00016	0.000047	0.000031
Grand Ronde River	Dioxin/furans	OCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
Grand Ronde River	Dioxin/furans	OCDF	WB	3	0	0.000020	0.000040	0.000015	0.0000050
Grand Ronde River	Guaiacols/Phenols	4-Chloroguaiacol	E	3	0	960	980	480	4.3
Grand Ronde River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	460	2,500	610	540
Grand Ronde River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	490	2,500	580	570
Grand Ronde River	Guaiacols/Phenols	3,4-Dichloroguaiacol	E	3	0	960	980	480	4.3
Grand Ronde River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	460	2,500	610	540
Grand Ronde River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	490	2,500	580	570
Grand Ronde River	Guaiacols/Phenols	4,5-Dichloroguaiacol	E	3	0	960	980	480	4.3
Grand Ronde River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	460	2,500	610	540
Grand Ronde River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	490	2,500	580	570
Grand Ronde River	Guaiacols/Phenols	4,6-Dichloroguaiacol	E	3	0	960	980	480	4.3
Grand Ronde River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	460	2,500	610	540
Grand Ronde River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	490	2,500	580	570
Grand Ronde River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	E	3	0	960	980	480	4.3
Grand Ronde River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	460	2,500	610	540
Grand Ronde River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	490	2,500	580	570
Grand Ronde River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	E	3	0	390	390	190	1.7
Grand Ronde River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	190	980	240	220
Grand Ronde River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	200	990	230	230
Grand Ronde River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	E	3	0	960	980	480	4.3
Grand Ronde River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	460	2,500	610	540
Grand Ronde River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	490	2,500	580	570
Grand Ronde River	Guaiacols/Phenols	Tetrachloroguaiacol	E	3	0	390	390	190	1.7
Grand Ronde River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	190	980	240	220
Grand Ronde River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	200	990	230	230
Grand Ronde River	Guaiacols/Phenols	2-Chlorophenol	E	3	0	390	390	190	1.7

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Grand Ronde River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	190	980	240	220
Grand Ronde River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	200	990	230	230
Grand Ronde River	Guaiacols/Phenols	4-Chloro-3-methylphenol	E	3	0	390	390	190	1.7
Grand Ronde River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	190	980	240	220
Grand Ronde River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	200	990	230	230
Grand Ronde River	Guaiacols/Phenols	2,4-Dichlorophenol	E	3	0	390	390	190	1.7
Grand Ronde River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	190	980	240	220
Grand Ronde River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	200	990	230	230
Grand Ronde River	Guaiacols/Phenols	2,4-Dimethylphenol	E	3	0	960	980	480	4.3
Grand Ronde River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	460	2,500	610	540
Grand Ronde River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	490	2,500	580	570
Grand Ronde River	Guaiacols/Phenols	2,4,5-Trichlorophenol	E	3	0	390	390	190	1.7
Grand Ronde River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	190	980	240	220
Grand Ronde River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	200	990	230	230
Grand Ronde River	Guaiacols/Phenols	2,4,6-Trichlorophenol	E	3	0	390	390	190	1.7
Grand Ronde River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	190	980	240	220
Grand Ronde River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	200	990	230	230
Grand Ronde River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	E	3	0	390	390	190	1.7
Grand Ronde River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	190	980	240	220
Grand Ronde River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	200	990	230	230
Grand Ronde River	Guaiacols/Phenols	Pentachlorophenol	E	3	0	390	390	190	1.7
Grand Ronde River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	190	980	240	220
Grand Ronde River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	200	990	230	230
Grand Ronde River	Guaiacols/Phenols	Phenol	E	3	0	390	390	190	1.7
Grand Ronde River	Guaiacols/Phenols	Phenol	FS	3	0	190	980	240	220
Grand Ronde River	Guaiacols/Phenols	Phenol	WB	3	0	200	990	230	230
Grand Ronde River	Metals	Aluminum	E	3	1	1,000	5,000	1,400	1,000
Grand Ronde River	Metals	Aluminum	FS	3	3	1,300	1,400	1,300	180
Grand Ronde River	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
Grand Ronde River	Metals	Antimony	E	3	0	50	250	58	58
Grand Ronde River	Metals	Antimony	FS	3	0	50	50	25	0.00
Grand Ronde River	Metals	Antimony	WB	3	0	50	50	25	0.00
Grand Ronde River	Metals	Arsenic	E	3	2	410	540	400	150
Grand Ronde River	Metals	Arsenic	FS	3	3	740	980	830	130
Grand Ronde River	Metals	Arsenic	WB	3	3	760	1,000	850	130
Grand Ronde River	Metals	Barium	E	3	0	200	1,000	230	230
Grand Ronde River	Metals	Barium	FS	3	0	200	200	100	0.00
Grand Ronde River	Metals	Barium	WB	3	0	200	200	100	0.00
Grand Ronde River	Metals	Beryllium	E	3	0	4.0	20	4.7	4.6
Grand Ronde River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Grand Ronde River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Grand Ronde River	Metals	Cadmium	E	3	3	22	72	39	29
Grand Ronde River	Metals	Cadmium	FS	3	3	11	13	12	1.2
Grand Ronde River	Metals	Cadmium	WB	3	3	130	150	140	13
Grand Ronde River	Metals	Chromium	E	3	0	100	500	120	120
Grand Ronde River	Metals	Chromium	FS	3	0	100	100	50	0.00
Grand Ronde River	Metals	Chromium	WB	3	3	100	130	110	15
Grand Ronde River	Metals	Cobalt	E	3	3	11	45	28	17
Grand Ronde River	Metals	Cobalt	FS	3	0	1.0	1.0	0.50	0.00
Grand Ronde River	Metals	Cobalt	WB	3	3	34	81	60	24
Grand Ronde River	Metals	Copper	E	3	3	5,300	6,300	5,800	530
Grand Ronde River	Metals	Copper	FS	3	3	730	750	740	14
Grand Ronde River	Metals	Copper	WB	3	3	1,300	1,500	1,400	65
Grand Ronde River	Metals	Lead	E	3	1	10	50	17	11
Grand Ronde River	Metals	Lead	FS	3	2	10	27	14	12
Grand Ronde River	Metals	Lead	WB	3	2	10	20	14	8.1
Grand Ronde River	Metals	Manganese	E	3	3	1,200	1,900	1,400	370
Grand Ronde River	Metals	Manganese	FS	3	3	81	94	87	6.6
Grand Ronde River	Metals	Manganese	WB	3	3	370	480	420	53
Grand Ronde River	Metals	Mercury	E	3	0	97	120	53	6.3
Grand Ronde River	Metals	Mercury	FS	3	1	110	130	81	36
Grand Ronde River	Metals	Mercury	WB	3	1	99	130	77	46
Grand Ronde River	Metals	Nickel	E	3	2	45	150	65	18
Grand Ronde River	Metals	Nickel	FS	3	3	32	40	33	7.8
Grand Ronde River	Metals	Nickel	WB	3	0	30	30	15	0.00
Grand Ronde River	Metals	Selenium	E	3	3	3,700	4,300	4,100	330
Grand Ronde River	Metals	Selenium	FS	3	3	290	310	300	10
Grand Ronde River	Metals	Selenium	WB	3	3	360	530	450	84
Grand Ronde River	Metals	Silver	E	3	0	100	500	120	120
Grand Ronde River	Metals	Silver	FS	3	0	100	100	50	0.00
Grand Ronde River	Metals	Silver	WB	3	0	100	100	50	0.00
Grand Ronde River	Metals	Thallium	E	3	0	50	250	58	58
Grand Ronde River	Metals	Thallium	FS	3	0	50	50	25	0.00
Grand Ronde River	Metals	Thallium	WB	3	0	50	50	25	0.00
Grand Ronde River	Metals	Vanadium	E	3	2	16	50	20	4.6
Grand Ronde River	Metals	Vanadium	FS	3	0	10	10	5.0	0.00

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Grand Ronde River	Metals	Vanadium	WB	3	3	13	24	17	6.1
Grand Ronde River	Metals	Zinc	E	3	3	46,000	48,000	47,000	1,100
Grand Ronde River	Metals	Zinc	FS	3	3	5,200	7,900	6,600	1,300
Grand Ronde River	Metals	Zinc	WB	3	3	19,000	24,000	21,000	2,600
Grand Ronde River	PCBs	Aroclor 1016	E	3	0	19	20	9.7	0.29
Grand Ronde River	PCBs	Aroclor 1016	FS	3	0	19	20	9.6	0.14
Grand Ronde River	PCBs	Aroclor 1016	WB	3	0	19	20	9.8	0.29
Grand Ronde River	PCBs	Aroclor 1221	E	3	0	19	20	9.7	0.29
Grand Ronde River	PCBs	Aroclor 1221	FS	3	0	19	20	9.6	0.14
Grand Ronde River	PCBs	Aroclor 1221	WB	3	0	19	20	9.8	0.29
Grand Ronde River	PCBs	Aroclor 1232	E	3	0	19	20	9.7	0.29
Grand Ronde River	PCBs	Aroclor 1232	FS	3	0	19	20	9.6	0.14
Grand Ronde River	PCBs	Aroclor 1232	WB	3	0	19	20	9.8	0.29
Grand Ronde River	PCBs	Aroclor 1242	E	3	0	19	20	9.7	0.29
Grand Ronde River	PCBs	Aroclor 1242	FS	3	0	19	20	9.6	0.14
Grand Ronde River	PCBs	Aroclor 1242	WB	3	0	19	20	9.8	0.29
Grand Ronde River	PCBs	Aroclor 1248	E	3	0	19	20	9.7	0.29
Grand Ronde River	PCBs	Aroclor 1248	FS	3	0	19	20	9.6	0.14
Grand Ronde River	PCBs	Aroclor 1248	WB	3	0	19	20	9.8	0.29
Grand Ronde River	PCBs	Aroclor 1254	E	3	3	15	18	16	1.5
Grand Ronde River	PCBs	Aroclor 1254	FS	3	3	16	17	16	0.58
Grand Ronde River	PCBs	Aroclor 1254	WB	3	3	17	19	18	1.2
Grand Ronde River	PCBs	Aroclor 1260	E	3	0	19	20	9.7	0.29
Grand Ronde River	PCBs	Aroclor 1260	FS	3	0	19	20	9.6	0.14
Grand Ronde River	PCBs	Aroclor 1260	WB	3	0	19	20	9.8	0.29
Grand Ronde River	PCBs	PCB 077	E	3	3	0.011	0.014	0.013	0.0015
Grand Ronde River	PCBs	PCB 077	FS	3	3	0.011	0.012	0.012	0.00033
Grand Ronde River	PCBs	PCB 077	WB	3	3	0.012	0.014	0.013	0.00087
Grand Ronde River	PCBs	PCB 105	E	3	3	0.20	0.24	0.22	0.022
Grand Ronde River	PCBs	PCB 105	FS	3	3	0.21	0.22	0.22	0.0043
Grand Ronde River	PCBs	PCB 105	WB	3	3	0.22	0.27	0.25	0.023
Grand Ronde River	PCBs	PCB 114	E	3	3	0.018	0.020	0.019	0.0013
Grand Ronde River	PCBs	PCB 114	FS	3	3	0.018	0.021	0.020	0.0013
Grand Ronde River	PCBs	PCB 114	WB	3	3	0.020	0.025	0.022	0.0028
Grand Ronde River	PCBs	PCB 118	E	3	3	0.44	0.51	0.48	0.040
Grand Ronde River	PCBs	PCB 118	FS	3	3	0.51	0.53	0.52	0.0095
Grand Ronde River	PCBs	PCB 118	WB	3	3	0.53	0.61	0.57	0.040
Grand Ronde River	PCBs	PCB 123	E	3	3	0.0081	0.012	0.011	0.0023
Grand Ronde River	PCBs	PCB 123	FS	3	3	0.011	0.011	0.011	0.00026
Grand Ronde River	PCBs	PCB 123	WB	3	3	0.012	0.013	0.012	0.00085
Grand Ronde River	PCBs	PCB 126	E	3	3	0.0021	0.0030	0.0025	0.00046
Grand Ronde River	PCBs	PCB 126	FS	3	2	0.00088	0.0035	0.0024	0.0017
Grand Ronde River	PCBs	PCB 126	WB	3	2	0.00082	0.0033	0.0016	0.0014
Grand Ronde River	PCBs	PCB 156	E	3	3	0.027	0.031	0.030	0.0023
Grand Ronde River	PCBs	PCB 156	FS	3	3	0.038	0.042	0.040	0.0026
Grand Ronde River	PCBs	PCB 156	WB	3	3	0.041	0.050	0.044	0.0049
Grand Ronde River	PCBs	PCB 157	E	3	3	0.0080	0.0094	0.0086	0.00072
Grand Ronde River	PCBs	PCB 157	FS	3	3	0.011	0.012	0.011	0.00040
Grand Ronde River	PCBs	PCB 157	WB	3	3	0.010	0.012	0.011	0.00089
Grand Ronde River	PCBs	PCB 167	E	3	3	0.019	0.022	0.020	0.0016
Grand Ronde River	PCBs	PCB 167	FS	3	3	0.027	0.028	0.028	0.00056
Grand Ronde River	PCBs	PCB 167	WB	3	3	0.028	0.033	0.030	0.0026
Grand Ronde River	PCBs	PCB 169	E	3	0	0.0010	0.0010	0.00050	0.00
Grand Ronde River	PCBs	PCB 169	FS	3	0	0.0010	0.0010	0.00050	0.00
Grand Ronde River	PCBs	PCB 169	WB	3	0	0.0010	0.0011	0.00051	0.000023
Grand Ronde River	PCBs	PCB 170	E	3	3	0.042	0.049	0.045	0.0033
Grand Ronde River	PCBs	PCB 170	FS	3	3	0.059	0.068	0.064	0.0046
Grand Ronde River	PCBs	PCB 170	WB	3	3	0.067	0.081	0.073	0.0070
Grand Ronde River	PCBs	PCB 180	E	3	3	0.13	0.17	0.15	0.019
Grand Ronde River	PCBs	PCB 180	FS	3	3	0.20	0.24	0.22	0.018
Grand Ronde River	PCBs	PCB 180	WB	3	3	0.23	0.28	0.25	0.024
Grand Ronde River	PCBs	PCB 189	E	3	3	0.0013	0.0021	0.0017	0.00043
Grand Ronde River	PCBs	PCB 189	FS	3	3	0.0025	0.0029	0.0027	0.00022
Grand Ronde River	PCBs	PCB 189	WB	3	2	0.0010	0.0029	0.0019	0.0012
Grand Ronde River	Pesticides	Aldrin	E	3	0	1.9	2.0	0.97	0.029
Grand Ronde River	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.96	0.014
Grand Ronde River	Pesticides	Aldrin	WB	3	0	1.9	2.0	0.98	0.029
Grand Ronde River	Pesticides	Alpha-BHC	E	3	0	1.9	2.0	0.97	0.029
Grand Ronde River	Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.96	0.014
Grand Ronde River	Pesticides	Alpha-BHC	WB	3	0	1.9	2.0	0.98	0.029
Grand Ronde River	Pesticides	Alpha-Chlordene	E	3	0	1.9	2.0	0.97	0.029
Grand Ronde River	Pesticides	Alpha-Chlordene	FS	3	0	1.9	2.0	0.96	0.014
Grand Ronde River	Pesticides	Alpha-Chlordene	WB	3	0	1.9	2.0	0.98	0.029
Grand Ronde River	Pesticides	Beta-BHC	E	3	0	1.9	2.0	0.97	0.029
Grand Ronde River	Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.96	0.014
Grand Ronde River	Pesticides	Beta-BHC	WB	3	0	1.9	2.0	0.98	0.029

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Grand Ronde River	Pesticides	cis-Chlordane (alpha-Chloro	E	3	0	1.9	2.0	0.97	0.029
Grand Ronde River	Pesticides	cis-Chlordane (alpha-Chloro	FS	3	0	1.9	2.0	0.96	0.014
Grand Ronde River	Pesticides	cis-Chlordane (alpha-Chloro	WB	3	0	1.9	2.0	0.98	0.029
Grand Ronde River	Pesticides	cis-Nonachlor	E	3	0	1.9	2.0	0.97	0.029
Grand Ronde River	Pesticides	cis-Nonachlor	FS	3	0	1.9	2.0	0.96	0.014
Grand Ronde River	Pesticides	cis-Nonachlor	WB	3	0	1.9	2.0	0.98	0.029
Grand Ronde River	Pesticides	DDD-o,p'	E	3	0	1.9	2.0	0.97	0.029
Grand Ronde River	Pesticides	DDD-o,p'	FS	3	0	1.9	2.0	0.96	0.014
Grand Ronde River	Pesticides	DDD-o,p'	WB	3	0	1.9	2.0	0.98	0.029
Grand Ronde River	Pesticides	DDE-o,p'	E	3	0	1.9	2.0	0.97	0.029
Grand Ronde River	Pesticides	DDE-o,p'	FS	3	0	1.9	2.0	0.96	0.014
Grand Ronde River	Pesticides	DDE-o,p'	WB	3	0	1.9	2.0	0.98	0.029
Grand Ronde River	Pesticides	DDT-o,p'	E	3	0	1.9	2.0	0.97	0.029
Grand Ronde River	Pesticides	DDT-o,p'	FS	3	0	1.9	2.0	0.96	0.014
Grand Ronde River	Pesticides	DDT-o,p'	WB	3	0	1.9	2.0	0.98	0.029
Grand Ronde River	Pesticides	DDD-p,p'	E	3	3	2.4	4.1	3.3	0.86
Grand Ronde River	Pesticides	DDD-p,p'	FS	3	3	1.9	2.1	2.0	0.12
Grand Ronde River	Pesticides	DDD-p,p'	WB	3	2	2.0	3.6	2.3	1.3
Grand Ronde River	Pesticides	DDE-p,p'	E	3	3	11	16	13	2.5
Grand Ronde River	Pesticides	DDE-p,p'	FS	3	3	11	14	12	1.5
Grand Ronde River	Pesticides	DDE-p,p'	WB	3	3	12	16	14	2.1
Grand Ronde River	Pesticides	DDT-p,p'	E	3	3	5.2	7.2	6.3	1.0
Grand Ronde River	Pesticides	DDT-p,p'	FS	3	3	5.0	5.9	5.3	0.49
Grand Ronde River	Pesticides	DDT-p,p'	WB	3	3	5.0	7.7	6.4	1.4
Grand Ronde River	Pesticides	DDMU	E	3	0	1.9	2.0	0.97	0.029
Grand Ronde River	Pesticides	DDMU	FS	3	0	1.9	2.0	0.96	0.014
Grand Ronde River	Pesticides	DDMU	WB	3	0	1.9	2.0	0.98	0.029
Grand Ronde River	Pesticides	Delta-BHC	E	3	0	1.9	2.0	0.97	0.029
Grand Ronde River	Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.96	0.014
Grand Ronde River	Pesticides	Delta-BHC	WB	3	0	1.9	2.0	0.98	0.029
Grand Ronde River	Pesticides	Endosulfan Sulfate	E	3	0	1.9	2.0	0.97	0.029
Grand Ronde River	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	0.95	na
Grand Ronde River	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	0.00	na
Grand Ronde River	Pesticides	Gamma-Chlordane	E	3	0	1.9	2.0	0.97	0.029
Grand Ronde River	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.0	0.96	0.014
Grand Ronde River	Pesticides	Gamma-Chlordane	WB	3	0	1.9	2.0	0.98	0.029
Grand Ronde River	Pesticides	gamma-Chlordene	E	3	0	1.9	2.0	0.97	0.029
Grand Ronde River	Pesticides	gamma-Chlordene	FS	3	0	1.9	2.0	0.96	0.014
Grand Ronde River	Pesticides	gamma-Chlordene	WB	3	0	1.9	2.0	0.98	0.029
Grand Ronde River	Pesticides	Heptachlor	E	3	0	1.9	2.0	0.97	0.029
Grand Ronde River	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.96	0.014
Grand Ronde River	Pesticides	Heptachlor	WB	3	0	1.9	2.0	0.98	0.029
Grand Ronde River	Pesticides	Heptachlor Epoxide	E	3	0	1.9	2.0	0.97	0.029
Grand Ronde River	Pesticides	Heptachlor Epoxide	FS	3	0	1.9	2.0	0.96	0.014
Grand Ronde River	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	2.0	0.98	0.029
Grand Ronde River	Pesticides	Hexachlorobenzene	E	3	3	4.3	5.1	4.7	0.40
Grand Ronde River	Pesticides	Hexachlorobenzene	FS	3	3	2.7	3.4	3.1	0.34
Grand Ronde River	Pesticides	Hexachlorobenzene	WB	3	3	3.3	3.6	3.5	0.15
Grand Ronde River	Pesticides	Lindane	E	3	0	1.9	2.0	0.97	0.029
Grand Ronde River	Pesticides	Lindane	FS	3	0	1.9	2.0	0.96	0.014
Grand Ronde River	Pesticides	Lindane	WB	3	0	1.9	2.0	0.98	0.029
Grand Ronde River	Pesticides	Mirex	E	3	0	1.9	2.0	0.97	0.029
Grand Ronde River	Pesticides	Mirex	FS	3	0	1.9	2.0	0.96	0.014
Grand Ronde River	Pesticides	Mirex	WB	3	0	1.9	2.0	0.98	0.029
Grand Ronde River	Pesticides	Oxychlordane	E	3	0	1.9	2.0	0.97	0.029
Grand Ronde River	Pesticides	Oxychlordane	FS	3	0	1.9	2.0	0.96	0.014
Grand Ronde River	Pesticides	Oxychlordane	WB	3	0	1.9	2.0	0.98	0.029
Grand Ronde River	Pesticides	Pentachloroanisol	E	3	3	0.76	2.2	1.3	0.78
Grand Ronde River	Pesticides	Pentachloroanisol	FS	3	0	1.9	2.0	0.96	0.014
Grand Ronde River	Pesticides	Pentachloroanisol	WB	3	1	1.3	2.0	1.1	0.17
Grand Ronde River	Pesticides	Toxaphene	E	3	0	57	59	29	0.58
Grand Ronde River	Pesticides	Toxaphene	FS	3	0	56	59	29	0.76
Grand Ronde River	Pesticides	Toxaphene	WB	3	0	57	59	29	0.58
Grand Ronde River	Pesticides	trans-Nonachlor	E	3	3	2.5	3.3	2.9	0.40
Grand Ronde River	Pesticides	trans-Nonachlor	FS	3	3	3.4	3.7	3.5	0.16
Grand Ronde River	Pesticides	trans-Nonachlor	WB	3	3	3.7	4.5	4.0	0.42
Grand Ronde River	Semivolatiles	1,2,4-Trichlorobenzene	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	4.6	25	6.1	5.4
Grand Ronde River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	4.9	25	5.8	5.7
Grand Ronde River	Semivolatiles	1,2-Diphenylhydrazine	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	4.6	25	6.1	5.4
Grand Ronde River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	4.9	25	5.8	5.7
Grand Ronde River	Semivolatiles	2,4-Dinitrotoluene	E	3	0	20	96	29	27
Grand Ronde River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	9.2	49	12	11
Grand Ronde River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	9.9	50	12	11
Grand Ronde River	Semivolatiles	2,6-Dinitrotoluene	E	3	0	39	190	71	44

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Grand Ronde River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	19	98	24	22
Grand Ronde River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	20	99	23	23
Grand Ronde River	Semivolatiles	2-Chloronaphthalene	E	3	0	20	96	35	22
Grand Ronde River	Semivolatiles	2-Chloronaphthalene	FS	3	0	9.2	49	12	11
Grand Ronde River	Semivolatiles	2-Chloronaphthalene	WB	3	0	9.9	50	12	11
Grand Ronde River	Semivolatiles	4-Bromophenyl-Phenylether	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	4.6	25	6.1	5.4
Grand Ronde River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	4.9	25	5.8	5.7
Grand Ronde River	Semivolatiles	4-Chlorophenyl-Phenylether	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	4.6	25	6.1	5.4
Grand Ronde River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	4.9	25	5.8	5.7
Grand Ronde River	Semivolatiles	Acenaphthene	E	3	0	20	96	35	22
Grand Ronde River	Semivolatiles	Acenaphthene	FS	3	0	9.2	49	12	11
Grand Ronde River	Semivolatiles	Acenaphthene	WB	3	0	9.9	50	12	11
Grand Ronde River	Semivolatiles	Acenaphthylene	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	Acenaphthylene	FS	3	0	4.6	25	6.1	5.4
Grand Ronde River	Semivolatiles	Acenaphthylene	WB	3	0	4.9	25	5.8	5.7
Grand Ronde River	Semivolatiles	Anthracene	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	Anthracene	FS	3	0	4.6	25	6.1	5.4
Grand Ronde River	Semivolatiles	Anthracene	WB	3	0	4.9	25	5.8	5.7
Grand Ronde River	Semivolatiles	Benzene, 1,2-dichloro-	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	4.6	25	6.1	5.4
Grand Ronde River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	4.9	25	5.8	5.7
Grand Ronde River	Semivolatiles	Benzene, 1,3-dichloro-	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	4.6	25	6.1	5.4
Grand Ronde River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	4.9	25	5.8	5.7
Grand Ronde River	Semivolatiles	Benzene, 1,4-dichloro-	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	4.6	25	6.1	5.4
Grand Ronde River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	4.9	25	5.8	5.7
Grand Ronde River	Semivolatiles	Benzo(a)anthracene	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	Benzo(a)anthracene	FS	3	0	17	25	11	2.0
Grand Ronde River	Semivolatiles	Benzo(a)anthracene	WB	3	0	25	25	12	0.076
Grand Ronde River	Semivolatiles	Benzo(a)pyrene	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	Benzo(a)pyrene	FS	3	0	17	25	11	2.0
Grand Ronde River	Semivolatiles	Benzo(a)pyrene	WB	3	0	25	25	12	0.076
Grand Ronde River	Semivolatiles	Benzo(g,h,i)perylene	E	3	0	20	96	35	22
Grand Ronde River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	34	49	22	4.1
Grand Ronde River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	49	50	25	0.15
Grand Ronde River	Semivolatiles	Benzo[b]Fluoranthene	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	17	25	11	2.0
Grand Ronde River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	25	25	12	0.076
Grand Ronde River	Semivolatiles	Benzo[k]fluoranthene	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	17	25	11	2.0
Grand Ronde River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	25	25	12	0.076
Grand Ronde River	Semivolatiles	bis(2-Chloroisopropyl)ether	E	3	0	20	96	35	22
Grand Ronde River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	9.2	49	12	11
Grand Ronde River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	9.9	50	12	11
Grand Ronde River	Semivolatiles	Chrysene	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	Chrysene	FS	3	0	17	25	11	2.0
Grand Ronde River	Semivolatiles	Chrysene	WB	3	0	25	25	12	0.076
Grand Ronde River	Semivolatiles	Dibenz[a,h]anthracene	E	3	0	20	96	35	22
Grand Ronde River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	34	49	22	4.1
Grand Ronde River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	49	50	25	0.15
Grand Ronde River	Semivolatiles	Dibenzofuran	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	Dibenzofuran	FS	3	0	4.6	25	6.1	5.4
Grand Ronde River	Semivolatiles	Dibenzofuran	WB	3	0	4.9	25	5.8	5.7
Grand Ronde River	Semivolatiles	Fluoranthene	E	3	0	20	96	35	22
Grand Ronde River	Semivolatiles	Fluoranthene	FS	3	0	9.2	49	12	11
Grand Ronde River	Semivolatiles	Fluoranthene	WB	3	0	9.9	50	12	11
Grand Ronde River	Semivolatiles	9H-Fluorene	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	9H-Fluorene	FS	3	0	4.6	25	6.1	5.4
Grand Ronde River	Semivolatiles	9H-Fluorene	WB	3	0	4.9	25	5.8	5.7
Grand Ronde River	Semivolatiles	Hexachlorobutadiene	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	Hexachlorobutadiene	FS	3	0	4.6	25	6.1	5.4
Grand Ronde River	Semivolatiles	Hexachlorobutadiene	WB	3	0	4.9	25	5.8	5.7
Grand Ronde River	Semivolatiles	Hexachloroethane	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	Hexachloroethane	FS	3	0	4.6	25	6.1	5.4
Grand Ronde River	Semivolatiles	Hexachloroethane	WB	3	0	4.9	25	5.8	5.7
Grand Ronde River	Semivolatiles	Indeno(1,2,3-cd)pyrene	E	3	0	20	96	35	22
Grand Ronde River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	34	49	22	4.1
Grand Ronde River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	49	50	25	0.15
Grand Ronde River	Semivolatiles	Naphthalene	E	3	1	57	91	51	25
Grand Ronde River	Semivolatiles	Naphthalene	FS	3	0	42	63	26	5.1
Grand Ronde River	Semivolatiles	Naphthalene	WB	3	0	35	43	20	2.2
Grand Ronde River	Semivolatiles	Naphthalene, 1-methyl-	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	4.6	25	6.1	5.4

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Grand Ronde River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	4.9	25	5.8	5.7
Grand Ronde River	Semivolatiles	Naphthalene, 2-methyl-	E	3	1	12	48	20	6.9
Grand Ronde River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	1	6.1	29	8.0	6.0
Grand Ronde River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	4.9	25	5.8	5.7
Grand Ronde River	Semivolatiles	Nitrobenzene	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	Nitrobenzene	FS	3	0	4.6	25	6.1	5.4
Grand Ronde River	Semivolatiles	Nitrobenzene	WB	3	0	4.9	25	5.8	5.7
Grand Ronde River	Semivolatiles	Phenanthrene	E	3	0	9.8	48	18	11
Grand Ronde River	Semivolatiles	Phenanthrene	FS	3	0	4.6	25	6.1	5.4
Grand Ronde River	Semivolatiles	Phenanthrene	WB	3	0	5.0	25	6.0	5.5
Grand Ronde River	Semivolatiles	Pyrene	E	3	0	20	96	35	22
Grand Ronde River	Semivolatiles	Pyrene	FS	3	0	34	49	22	4.1
Grand Ronde River	Semivolatiles	Pyrene	WB	3	1	13	50	21	7.0
Grand Ronde River	Semivolatiles	Retene	E	3	0	20	96	35	22
Grand Ronde River	Semivolatiles	Retene	FS	3	0	34	49	22	4.1
Grand Ronde River	Semivolatiles	Retene	WB	3	0	49	50	25	0.15
Klickitat River	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000020	0.000030	0.000017	0.000012
Klickitat River	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
Klickitat River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000010	0.000090	0.000035	0.000048
Klickitat River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.000080	0.00014	0.00012	0.000035
Klickitat River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000010	0.000010	0.0000050	0.00
Klickitat River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	2	0.000020	0.000030	0.000020	0.000010
Klickitat River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	1	0.000010	0.000090	0.000033	0.000049
Klickitat River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000010	0.00013	0.000065	0.000063
Klickitat River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000010	0.000060	0.000023	0.000032
Klickitat River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
Klickitat River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.00015	0.00019	0.00017	0.000021
Klickitat River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	2	0.000010	0.00020	0.00012	0.000100
Klickitat River	Dioxin/furans	OCDD	FS	3	3	0.00042	0.00053	0.00048	0.000057
Klickitat River	Dioxin/furans	OCDD	WB	3	3	0.00029	0.00069	0.00043	0.00022
Klickitat River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00044	0.00074	0.00056	0.00016
Klickitat River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00074	0.0011	0.00088	0.00016
Klickitat River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	2	0.000020	0.00010	0.000063	0.000047
Klickitat River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.000080	0.00012	0.000093	0.000023
Klickitat River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00012	0.00013	0.00013	0.0000058
Klickitat River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00015	0.00017	0.00016	0.000010
Klickitat River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
Klickitat River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	2	0.000020	0.000060	0.000033	0.000025
Klickitat River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000030	0.000040	0.000037	0.0000058
Klickitat River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	3	0.000020	0.000040	0.000030	0.000010
Klickitat River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
Klickitat River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	1	0.000010	0.000020	0.000010	0.00
Klickitat River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	2	0.000010	0.000050	0.000032	0.000024
Klickitat River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	2	0.000020	0.000050	0.000030	0.000020
Klickitat River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
Klickitat River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	3	0.000040	0.00011	0.000063	0.000040
Klickitat River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	2	0.000020	0.000020	0.000017	0.0000058
Klickitat River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
Klickitat River	Dioxin/furans	OCDF	FS	3	2	0.000030	0.000090	0.000062	0.000041
Klickitat River	Dioxin/furans	OCDF	WB	3	2	0.000010	0.00017	0.000072	0.000087
Klickitat River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	930	990	480	16
Klickitat River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	870	980	460	31
Klickitat River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	930	990	480	16
Klickitat River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	870	980	460	31
Klickitat River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	930	990	480	16
Klickitat River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	870	980	460	31
Klickitat River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	930	990	480	16
Klickitat River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	870	980	460	31
Klickitat River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	930	990	480	16
Klickitat River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	870	980	460	31
Klickitat River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	370	400	190	6.5
Klickitat River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	350	390	180	12
Klickitat River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	930	990	480	16
Klickitat River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	870	980	460	31
Klickitat River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	370	400	190	6.5
Klickitat River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	350	390	180	12
Klickitat River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	370	400	190	6.5
Klickitat River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	350	390	180	12
Klickitat River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	370	400	190	6.5
Klickitat River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	350	390	180	12
Klickitat River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	370	400	190	6.5
Klickitat River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	350	390	180	12
Klickitat River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	930	990	480	16
Klickitat River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	870	980	460	31
Klickitat River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	370	400	190	6.5
Klickitat River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	350	390	180	12

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Klickitat River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	370	400	190	6.5
Klickitat River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	350	390	180	12
Klickitat River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	370	400	190	6.5
Klickitat River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	350	390	180	12
Klickitat River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	370	400	190	6.5
Klickitat River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	350	390	180	12
Klickitat River	Guaiacols/Phenols	Phenol	FS	3	0	370	400	190	6.5
Klickitat River	Guaiacols/Phenols	Phenol	WB	3	0	350	390	190	9.8
Klickitat River	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
Klickitat River	Metals	Aluminum	WB	3	1	1,000	1,400	800	520
Klickitat River	Metals	Antimony	FS	3	0	50	50	25	0.00
Klickitat River	Metals	Antimony	WB	3	0	50	50	25	0.00
Klickitat River	Metals	Arsenic	FS	3	3	560	1,000	790	230
Klickitat River	Metals	Arsenic	WB	3	3	570	610	590	25
Klickitat River	Metals	Barium	FS	3	0	200	200	100	0.00
Klickitat River	Metals	Barium	WB	3	0	200	200	100	0.00
Klickitat River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Klickitat River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Klickitat River	Metals	Cadmium	FS	3	3	9.3	11	10	0.86
Klickitat River	Metals	Cadmium	WB	3	3	82	130	100	25
Klickitat River	Metals	Chromium	FS	3	3	140	250	180	59
Klickitat River	Metals	Chromium	WB	3	3	160	190	170	17
Klickitat River	Metals	Cobalt	FS	3	3	120	190	150	35
Klickitat River	Metals	Cobalt	WB	3	3	130	180	150	27
Klickitat River	Metals	Copper	FS	3	3	710	2,100	1,300	700
Klickitat River	Metals	Copper	WB	3	3	1,800	2,300	2,100	240
Klickitat River	Metals	Lead	FS	3	2	10	140	67	69
Klickitat River	Metals	Lead	WB	3	3	74	92	85	9.9
Klickitat River	Metals	Manganese	FS	3	3	99	120	110	10
Klickitat River	Metals	Manganese	WB	3	3	320	420	360	51
Klickitat River	Metals	Mercury	FS	3	3	150	510	310	190
Klickitat River	Metals	Mercury	WB	3	3	89	110	95	9.3
Klickitat River	Metals	Nickel	FS	3	3	260	370	330	59
Klickitat River	Metals	Nickel	WB	3	3	380	630	530	130
Klickitat River	Metals	Selenium	FS	3	3	300	310	310	5.8
Klickitat River	Metals	Selenium	WB	3	3	500	610	560	58
Klickitat River	Metals	Silver	FS	3	0	100	100	50	0.00
Klickitat River	Metals	Silver	WB	3	0	100	100	50	0.00
Klickitat River	Metals	Thallium	FS	3	0	50	50	25	0.00
Klickitat River	Metals	Thallium	WB	3	0	50	50	25	0.00
Klickitat River	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
Klickitat River	Metals	Vanadium	WB	3	3	26	37	33	5.9
Klickitat River	Metals	Zinc	FS	3	3	5,700	6,700	6,300	560
Klickitat River	Metals	Zinc	WB	3	3	25,000	34,000	30,000	4,700
Klickitat River	PCBs	Aroclor 1016	FS	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1016	WB	3	0	20	20	10	0.00
Klickitat River	PCBs	Aroclor 1221	FS	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1221	WB	3	0	20	20	10	0.00
Klickitat River	PCBs	Aroclor 1232	FS	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1232	WB	3	0	20	20	10	0.00
Klickitat River	PCBs	Aroclor 1242	FS	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1242	WB	3	0	20	20	10	0.00
Klickitat River	PCBs	Aroclor 1248	FS	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1248	WB	3	0	20	20	10	0.00
Klickitat River	PCBs	Aroclor 1254	FS	3	3	12	21	16	4.5
Klickitat River	PCBs	Aroclor 1254	WB	3	3	13	26	19	6.5
Klickitat River	PCBs	Aroclor 1260	FS	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1260	WB	3	0	20	20	10	0.00
Klickitat River	PCBs	PCB 077	FS	3	2	0.00076	0.010	0.0059	0.0050
Klickitat River	PCBs	PCB 077	WB	3	3	0.011	0.012	0.012	0.00072
Klickitat River	PCBs	PCB 105	FS	3	3	0.15	0.26	0.19	0.060
Klickitat River	PCBs	PCB 105	WB	3	3	0.30	0.43	0.36	0.066
Klickitat River	PCBs	PCB 114	FS	3	3	0.013	0.024	0.017	0.0063
Klickitat River	PCBs	PCB 114	WB	3	3	0.030	0.041	0.034	0.0064
Klickitat River	PCBs	PCB 118	FS	3	3	0.31	0.56	0.41	0.13
Klickitat River	PCBs	PCB 118	WB	3	3	0.69	0.92	0.78	0.12
Klickitat River	PCBs	PCB 123	FS	3	3	0.0084	0.014	0.010	0.0033
Klickitat River	PCBs	PCB 123	WB	3	3	0.015	0.018	0.016	0.0015
Klickitat River	PCBs	PCB 126	FS	3	0	0.0017	0.0022	0.00100	0.00012
Klickitat River	PCBs	PCB 126	WB	3	2	0.0019	0.0047	0.0031	0.0019
Klickitat River	PCBs	PCB 156	FS	3	3	0.030	0.073	0.044	0.025
Klickitat River	PCBs	PCB 156	WB	3	3	0.069	0.089	0.077	0.010
Klickitat River	PCBs	PCB 157	FS	3	3	0.0076	0.019	0.012	0.0062
Klickitat River	PCBs	PCB 157	WB	3	3	0.017	0.029	0.022	0.0064
Klickitat River	PCBs	PCB 167	FS	3	3	0.019	0.034	0.025	0.0083
Klickitat River	PCBs	PCB 167	WB	3	3	0.038	0.048	0.042	0.0054

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Klickitat River	PCBs	PCB 169	FS	3	0	0.0013	0.0026	0.00100	0.00033
Klickitat River	PCBs	PCB 169	WB	3	0	0.0011	0.0027	0.00090	0.00041
Klickitat River	PCBs	PCB 170	FS	3	3	0.055	0.17	0.099	0.061
Klickitat River	PCBs	PCB 170	WB	3	3	0.13	0.20	0.16	0.035
Klickitat River	PCBs	PCB 180	FS	3	3	0.18	0.53	0.31	0.19
Klickitat River	PCBs	PCB 180	WB	3	3	0.40	0.63	0.50	0.12
Klickitat River	PCBs	PCB 189	FS	3	1	0.0011	0.0057	0.0024	0.0029
Klickitat River	PCBs	PCB 189	WB	3	3	0.0047	0.0072	0.0057	0.0013
Klickitat River	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Aldrin	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Alpha-BHC	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Alpha-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Alpha-Chlordane	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Beta-BHC	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	cis-Chlordane (alpha-Chloro	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	cis-Chlordane (alpha-Chloro	WB	3	1	1.4	2.0	1.1	0.23
Klickitat River	Pesticides	cis-Nonachlor	FS	3	1	1.1	2.0	1.0	0.058
Klickitat River	Pesticides	cis-Nonachlor	WB	3	1	1.9	2.0	1.3	0.52
Klickitat River	Pesticides	DDD-o,p'	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	DDD-o,p'	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	DDE-o,p'	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	DDE-o,p'	WB	3	1	1.4	2.0	1.1	0.23
Klickitat River	Pesticides	DDT-o,p'	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	DDT-o,p'	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	DDD-p,p'	FS	3	2	1.4	2.0	1.4	0.35
Klickitat River	Pesticides	DDD-p,p'	WB	3	2	2.0	3.9	2.7	1.5
Klickitat River	Pesticides	DDE-p,p'	FS	3	3	6.2	18	11	6.3
Klickitat River	Pesticides	DDE-p,p'	WB	3	3	16	22	20	3.2
Klickitat River	Pesticides	DDT-p,p'	FS	3	2	2.0	4.1	2.7	1.6
Klickitat River	Pesticides	DDT-p,p'	WB	3	3	3.3	5.4	4.4	1.1
Klickitat River	Pesticides	DDMU	FS	3	1	1.9	2.4	1.5	0.82
Klickitat River	Pesticides	DDMU	WB	3	1	1.6	2.0	1.2	0.35
Klickitat River	Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Delta-BHC	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	0.00	na
Klickitat River	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	0.00	na
Klickitat River	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Gamma-Chlordane	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	gamma-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	gamma-Chlordane	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Heptachlor	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Heptachlor Epoxide	FS	3	0	0.00	0.00	0.00	na
Klickitat River	Pesticides	Heptachlor Epoxide	WB	3	0	0.00	0.00	0.00	na
Klickitat River	Pesticides	Hexachlorobenzene	FS	3	3	1.2	2.1	1.6	0.45
Klickitat River	Pesticides	Hexachlorobenzene	WB	3	3	2.0	2.4	2.1	0.23
Klickitat River	Pesticides	Lindane	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Lindane	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Mirex	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Mirex	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Oxychlordane	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Oxychlordane	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Pentachloroanisol	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Pentachloroanisol	WB	3	0	2.0	2.0	1.0	0.00
Klickitat River	Pesticides	Toxaphene	FS	3	0	57	60	30	0.87
Klickitat River	Pesticides	Toxaphene	WB	3	0	59	60	30	0.29
Klickitat River	Pesticides	trans-Nonachlor	FS	3	3	1.2	2.6	1.9	0.70
Klickitat River	Pesticides	trans-Nonachlor	WB	3	2	2.0	3.2	2.1	1.1
Klickitat River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	17	20	9.1	0.60
Klickitat River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	37	40	19	0.65
Klickitat River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	35	39	18	1.2
Klickitat River	Semivolatiles	2-Chloronaphthalene	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	2-Chloronaphthalene	WB	3	0	17	20	9.1	0.60
Klickitat River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	Acenaphthene	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	Acenaphthene	WB	3	0	17	20	9.1	0.60

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Klickitat River	Semivolatiles	Acenaphthylene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Acenaphthylene	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	Anthracene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Anthracene	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	17	20	9.1	0.60
Klickitat River	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	17	20	9.1	0.60
Klickitat River	Semivolatiles	Chrysene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Chrysene	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	17	20	9.1	0.60
Klickitat River	Semivolatiles	Dibenzofuran	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Dibenzofuran	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	Fluoranthene	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	Fluoranthene	WB	3	0	17	20	9.1	0.60
Klickitat River	Semivolatiles	9H-Fluorene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	9H-Fluorene	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	Hexachloroethane	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Hexachloroethane	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	17	20	9.1	0.60
Klickitat River	Semivolatiles	Naphthalene	FS	3	0	28	33	16	1.6
Klickitat River	Semivolatiles	Naphthalene	WB	3	0	17	27	11	2.5
Klickitat River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	Nitrobenzene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Nitrobenzene	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	Phenanthrene	FS	3	0	9.3	9.9	4.8	0.15
Klickitat River	Semivolatiles	Phenanthrene	WB	3	0	8.7	9.8	4.6	0.30
Klickitat River	Semivolatiles	Pyrene	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	Pyrene	WB	3	0	17	20	9.1	0.60
Klickitat River	Semivolatiles	Retene	FS	3	0	19	20	9.6	0.30
Klickitat River	Semivolatiles	Retene	WB	3	0	17	20	9.1	0.60
Little White Salmon River	Dioxin/furans	2,3,7,8-TCDD	FS	3	0	0.000010	0.000020	0.0000083	0.0000029
Little White Salmon River	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000010	0.000030	0.0000083	0.0000058
Little White Salmon River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000010	0.00011	0.000062	0.000053
Little White Salmon River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	1	0.000020	0.000080	0.000035	0.000039
Little White Salmon River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	2	0.000010	0.000030	0.000018	0.000013
Little White Salmon River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000010	0.000040	0.000013	0.0000076
Little White Salmon River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	2	0.000010	0.000080	0.000048	0.000039
Little White Salmon River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000030	0.000080	0.000055	0.000035
Little White Salmon River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000010	0.000040	0.000025	0.000018
Little White Salmon River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	1	0.000030	0.000060	0.000032	0.000025
Little White Salmon River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000020	0.000080	0.000053	0.000038
Little White Salmon River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	2	0.000060	0.00015	0.000093	0.000060
Little White Salmon River	Dioxin/furans	OCDD	FS	3	1	0.000020	0.00010	0.000040	0.000052
Little White Salmon River	Dioxin/furans	OCDD	WB	3	3	0.00025	0.00030	0.00027	0.000025
Little White Salmon River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00053	0.00061	0.00058	0.000044
Little White Salmon River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00059	0.00069	0.00063	0.000051
Little White Salmon River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.00012	0.00014	0.00013	0.000012
Little White Salmon River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	1	0.000040	0.00011	0.000052	0.000051
Little White Salmon River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00015	0.00017	0.00016	0.000010
Little White Salmon River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	2	0.000050	0.00015	0.00011	0.000069
Little White Salmon River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	1	0.000010	0.000030	0.000015	0.000013
Little White Salmon River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	1	0.000030	0.000060	0.000028	0.0000029
Little White Salmon River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000030	0.000040	0.000033	0.0000058
Little White Salmon River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	1	0.000030	0.000060	0.000028	0.0000029

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Little White Salmon River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000020	0.0000083	0.0000029
Little White Salmon River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	2	0.000020	0.000060	0.000033	0.000015
Little White Salmon River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	1	0.000020	0.000040	0.000020	0.000017
Little White Salmon River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	1	0.000030	0.000060	0.000028	0.0000029
Little White Salmon River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000010	0.000020	0.000015	0.0000087
Little White Salmon River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	1	0.000030	0.000040	0.000025	0.000013
Little White Salmon River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000020	0.0000083	0.0000029
Little White Salmon River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000040	0.000013	0.0000076
Little White Salmon River	Dioxin/furans	OCDF	FS	3	0	0.000030	0.000040	0.000017	0.0000029
Little White Salmon River	Dioxin/furans	OCDF	WB	3	1	0.000030	0.000070	0.000032	0.0000029
Little White Salmon River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	980	990	490	2.2
Little White Salmon River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	930	960	470	6.8
Little White Salmon River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	980	990	490	2.2
Little White Salmon River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	930	960	470	6.8
Little White Salmon River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	980	990	490	2.2
Little White Salmon River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	930	960	470	6.8
Little White Salmon River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	980	990	490	2.2
Little White Salmon River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	930	960	470	6.8
Little White Salmon River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	980	990	490	2.2
Little White Salmon River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	930	960	470	6.8
Little White Salmon River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	390	390	200	0.87
Little White Salmon River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	370	380	190	2.8
Little White Salmon River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	980	990	490	2.2
Little White Salmon River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	930	960	470	6.8
Little White Salmon River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	390	390	200	0.87
Little White Salmon River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	370	380	190	2.8
Little White Salmon River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	390	390	200	0.87
Little White Salmon River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	370	380	190	2.8
Little White Salmon River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	390	390	200	0.87
Little White Salmon River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	370	380	190	2.8
Little White Salmon River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	390	390	200	0.87
Little White Salmon River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	370	380	190	2.8
Little White Salmon River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	980	990	490	2.2
Little White Salmon River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	930	960	470	6.8
Little White Salmon River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	390	390	200	0.87
Little White Salmon River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	370	380	190	2.8
Little White Salmon River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	390	390	200	0.87
Little White Salmon River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	370	380	190	2.8
Little White Salmon River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	390	390	200	0.87
Little White Salmon River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	370	380	190	2.8
Little White Salmon River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	390	390	200	0.87
Little White Salmon River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	370	380	190	2.8
Little White Salmon River	Guaiacols/Phenols	Phenol	FS	3	0	390	390	200	0.87
Little White Salmon River	Guaiacols/Phenols	Phenol	WB	3	0	370	380	190	2.8
Little White Salmon River	Metals	Aluminum	FS	3	1	1,000	1,300	760	460
Little White Salmon River	Metals	Aluminum	WB	3	2	1,000	1,700	1,100	600
Little White Salmon River	Metals	Antimony	FS	3	0	50	50	25	0.00
Little White Salmon River	Metals	Antimony	WB	3	0	50	50	25	0.00
Little White Salmon River	Metals	Arsenic	FS	3	3	760	1,200	940	200
Little White Salmon River	Metals	Arsenic	WB	3	3	860	870	860	5.2
Little White Salmon River	Metals	Barium	FS	3	0	200	200	100	0.00
Little White Salmon River	Metals	Barium	WB	3	0	200	200	100	0.00
Little White Salmon River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Little White Salmon River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Little White Salmon River	Metals	Cadmium	FS	3	3	11	13	12	1.2
Little White Salmon River	Metals	Cadmium	WB	3	3	130	150	140	7.8
Little White Salmon River	Metals	Chromium	FS	3	2	100	480	330	240
Little White Salmon River	Metals	Chromium	WB	3	3	470	500	490	15
Little White Salmon River	Metals	Cobalt	FS	3	3	3.3	4.8	3.8	0.84
Little White Salmon River	Metals	Cobalt	WB	3	3	95	130	120	20
Little White Salmon River	Metals	Copper	FS	3	3	650	680	660	17
Little White Salmon River	Metals	Copper	WB	3	3	1,300	1,500	1,500	100
Little White Salmon River	Metals	Lead	FS	3	0	10	10	5.0	0.00
Little White Salmon River	Metals	Lead	WB	3	0	10	10	5.0	0.00
Little White Salmon River	Metals	Manganese	FS	3	3	75	91	85	8.7
Little White Salmon River	Metals	Manganese	WB	3	3	320	390	350	31
Little White Salmon River	Metals	Mercury	FS	3	0	98	120	57	7.1
Little White Salmon River	Metals	Mercury	WB	3	0	98	110	54	4.4
Little White Salmon River	Metals	Nickel	FS	3	0	30	30	15	0.00
Little White Salmon River	Metals	Nickel	WB	3	3	340	750	530	210
Little White Salmon River	Metals	Selenium	FS	3	3	330	360	350	15
Little White Salmon River	Metals	Selenium	WB	3	3	520	650	580	66
Little White Salmon River	Metals	Silver	FS	3	0	100	100	50	0.00
Little White Salmon River	Metals	Silver	WB	3	0	100	100	50	0.00
Little White Salmon River	Metals	Thallium	FS	3	0	50	50	25	0.00
Little White Salmon River	Metals	Thallium	WB	3	0	50	50	25	0.00

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Little White Salmon River Metals		Vanadium	FS	3	0	10	10	5.0	0.00
Little White Salmon River Metals		Vanadium	WB	3	3	11	23	15	6.9
Little White Salmon River Metals		Zinc	FS	3	3	6,200	6,500	6,300	170
Little White Salmon River Metals		Zinc	WB	3	3	20,000	20,000	20,000	100
Little White Salmon River PCBs		Aroclor 1016	FS	3	0	18	20	9.7	0.58
Little White Salmon River PCBs		Aroclor 1016	WB	3	0	19	20	9.7	0.29
Little White Salmon River PCBs		Aroclor 1221	FS	3	0	18	20	9.7	0.58
Little White Salmon River PCBs		Aroclor 1221	WB	3	0	19	20	9.7	0.29
Little White Salmon River PCBs		Aroclor 1232	FS	3	0	18	20	9.7	0.58
Little White Salmon River PCBs		Aroclor 1232	WB	3	0	19	20	9.7	0.29
Little White Salmon River PCBs		Aroclor 1242	FS	3	0	18	20	9.7	0.58
Little White Salmon River PCBs		Aroclor 1242	WB	3	0	19	20	9.7	0.29
Little White Salmon River PCBs		Aroclor 1248	FS	3	0	18	20	9.7	0.58
Little White Salmon River PCBs		Aroclor 1248	WB	3	0	19	20	9.7	0.29
Little White Salmon River PCBs		Aroclor 1254	FS	3	3	15	19	17	2.1
Little White Salmon River PCBs		Aroclor 1254	WB	3	3	17	18	18	0.58
Little White Salmon River PCBs		Aroclor 1260	FS	3	0	18	20	9.7	0.58
Little White Salmon River PCBs		Aroclor 1260	WB	3	0	19	20	9.7	0.29
Little White Salmon River PCBs		PCB 077	FS	3	3	0.0099	0.013	0.011	0.0019
Little White Salmon River PCBs		PCB 077	WB	3	3	0.011	0.013	0.012	0.00096
Little White Salmon River PCBs		PCB 105	FS	3	3	0.20	0.26	0.23	0.030
Little White Salmon River PCBs		PCB 105	WB	3	3	0.23	0.26	0.24	0.012
Little White Salmon River PCBs		PCB 114	FS	3	3	0.020	0.026	0.022	0.0029
Little White Salmon River PCBs		PCB 114	WB	3	3	0.021	0.022	0.021	0.00035
Little White Salmon River PCBs		PCB 118	FS	3	3	0.48	0.59	0.53	0.057
Little White Salmon River PCBs		PCB 118	WB	3	3	0.53	0.56	0.55	0.013
Little White Salmon River PCBs		PCB 123	FS	3	3	0.011	0.012	0.012	0.00067
Little White Salmon River PCBs		PCB 123	WB	3	3	0.0078	0.013	0.011	0.0026
Little White Salmon River PCBs		PCB 126	FS	3	3	0.00085	0.0034	0.0024	0.0014
Little White Salmon River PCBs		PCB 126	WB	3	2	0.00064	0.0034	0.0023	0.0017
Little White Salmon River PCBs		PCB 156	FS	3	3	0.032	0.047	0.039	0.0072
Little White Salmon River PCBs		PCB 156	WB	3	3	0.042	0.046	0.044	0.0020
Little White Salmon River PCBs		PCB 157	FS	3	3	0.011	0.015	0.013	0.0024
Little White Salmon River PCBs		PCB 157	WB	3	3	0.012	0.016	0.013	0.0025
Little White Salmon River PCBs		PCB 167	FS	3	3	0.027	0.028	0.028	0.00079
Little White Salmon River PCBs		PCB 167	WB	3	3	0.028	0.031	0.029	0.0019
Little White Salmon River PCBs		PCB 169	FS	3	0	0.0011	0.0016	0.00066	0.00012
Little White Salmon River PCBs		PCB 169	WB	3	0	0.0011	0.0015	0.00063	0.00012
Little White Salmon River PCBs		PCB 170	FS	3	3	0.058	0.080	0.069	0.011
Little White Salmon River PCBs		PCB 170	WB	3	3	0.066	0.074	0.070	0.0041
Little White Salmon River PCBs		PCB 180	FS	3	3	0.21	0.27	0.24	0.031
Little White Salmon River PCBs		PCB 180	WB	3	3	0.24	0.25	0.24	0.0083
Little White Salmon River PCBs		PCB 189	FS	3	2	0.0010	0.0027	0.0019	0.0012
Little White Salmon River PCBs		PCB 189	WB	3	1	0.0010	0.0029	0.0013	0.0014
Little White Salmon River Pesticides		Aldrin	FS	3	0	1.8	2.0	0.97	0.058
Little White Salmon River Pesticides		Aldrin	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River Pesticides		Alpha-BHC	FS	3	0	1.8	2.0	0.97	0.058
Little White Salmon River Pesticides		Alpha-BHC	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River Pesticides		Alpha-Chlordane	FS	3	0	1.8	2.0	0.97	0.058
Little White Salmon River Pesticides		Alpha-Chlordane	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River Pesticides		Beta-BHC	FS	3	0	1.8	2.0	0.97	0.058
Little White Salmon River Pesticides		Beta-BHC	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River Pesticides		cis-Chlordane (alpha-Chloro	FS	3	0	1.8	2.0	0.97	0.058
Little White Salmon River Pesticides		cis-Chlordane (alpha-Chloro	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River Pesticides		cis-Nonachlor	FS	3	1	1.3	2.0	1.1	0.21
Little White Salmon River Pesticides		cis-Nonachlor	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River Pesticides		DDD-o,p'	FS	3	0	1.8	2.0	0.97	0.058
Little White Salmon River Pesticides		DDD-o,p'	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River Pesticides		DDE-o,p'	FS	3	1	1.4	2.0	1.1	0.26
Little White Salmon River Pesticides		DDE-o,p'	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River Pesticides		DDT-o,p'	FS	3	0	1.8	2.0	0.97	0.058
Little White Salmon River Pesticides		DDT-o,p'	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River Pesticides		DDD-p,p'	FS	3	3	1.5	3.0	2.2	0.76
Little White Salmon River Pesticides		DDD-p,p'	WB	3	3	2.1	3.4	2.6	0.68
Little White Salmon River Pesticides		DDE-p,p'	FS	3	3	8.8	13	11	2.2
Little White Salmon River Pesticides		DDE-p,p'	WB	3	3	13	15	14	1.0
Little White Salmon River Pesticides		DDT-p,p'	FS	3	3	4.0	5.3	4.6	0.66
Little White Salmon River Pesticides		DDT-p,p'	WB	3	3	4.2	6.7	5.4	1.3
Little White Salmon River Pesticides		DDMU	FS	3	1	1.4	2.0	1.1	0.26
Little White Salmon River Pesticides		DDMU	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River Pesticides		Delta-BHC	FS	3	0	1.8	2.0	0.97	0.058
Little White Salmon River Pesticides		Delta-BHC	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River Pesticides		Endosulfan Sulfate	FS	3	0	1.8	1.8	0.90	#DIV/0!
Little White Salmon River Pesticides		Endosulfan Sulfate	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River Pesticides		Gamma-Chlordane	FS	3	0	1.8	2.0	0.97	0.058
Little White Salmon River Pesticides		Gamma-Chlordane	WB	3	0	1.9	2.0	0.97	0.029

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Little White Salmon River	Pesticides	gamma-Chlordene	FS	3	0	1.8	2.0	0.97	0.058
Little White Salmon River	Pesticides	gamma-Chlordene	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River	Pesticides	Heptachlor	FS	3	0	1.8	2.0	0.97	0.058
Little White Salmon River	Pesticides	Heptachlor	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River	Pesticides	Heptachlor Epoxide	FS	3	0	1.8	1.8	0.90	#DIV/0!
Little White Salmon River	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River	Pesticides	Hexachlorobenzene	FS	3	2	1.8	3.0	2.2	1.2
Little White Salmon River	Pesticides	Hexachlorobenzene	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River	Pesticides	Lindane	FS	3	0	1.8	2.0	0.97	0.058
Little White Salmon River	Pesticides	Lindane	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River	Pesticides	Mirex	FS	3	0	1.8	2.0	0.97	0.058
Little White Salmon River	Pesticides	Mirex	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River	Pesticides	Oxychlordane	FS	3	0	1.8	2.0	0.97	0.058
Little White Salmon River	Pesticides	Oxychlordane	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River	Pesticides	Pentachloroanisol	FS	3	0	1.8	2.0	0.97	0.058
Little White Salmon River	Pesticides	Pentachloroanisol	WB	3	0	1.9	2.0	0.97	0.029
Little White Salmon River	Pesticides	Toxaphene	FS	3	0	55	60	29	1.3
Little White Salmon River	Pesticides	Toxaphene	WB	3	0	57	59	29	0.50
Little White Salmon River	Pesticides	trans-Nonachlor	FS	3	3	2.4	2.9	2.7	0.26
Little White Salmon River	Pesticides	trans-Nonachlor	WB	3	3	3.1	3.3	3.2	0.10
Little White Salmon River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.8	9.9	4.9	0.029
Little White Salmon River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	9.3	9.6	4.7	0.076
Little White Salmon River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.8	9.9	4.9	0.029
Little White Salmon River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	9.3	9.6	4.7	0.076
Little White Salmon River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	20	20	9.8	0.029
Little White Salmon River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	19	19	9.5	0.15
Little White Salmon River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	39	39	20	0.087
Little White Salmon River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	37	38	19	0.28
Little White Salmon River	Semivolatiles	2-Chloronaphthalene	FS	3	0	20	20	9.8	0.029
Little White Salmon River	Semivolatiles	2-Chloronaphthalene	WB	3	0	19	19	9.5	0.15
Little White Salmon River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.8	9.9	4.9	0.029
Little White Salmon River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	9.3	9.6	4.7	0.076
Little White Salmon River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.8	9.9	4.9	0.029
Little White Salmon River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	9.3	9.6	4.7	0.076
Little White Salmon River	Semivolatiles	Acenaphthene	FS	3	0	20	20	9.8	0.029
Little White Salmon River	Semivolatiles	Acenaphthene	WB	3	0	19	19	9.5	0.15
Little White Salmon River	Semivolatiles	Acenaphthylene	FS	3	0	9.8	9.9	4.9	0.029
Little White Salmon River	Semivolatiles	Acenaphthylene	WB	3	0	9.3	9.6	4.7	0.076
Little White Salmon River	Semivolatiles	Anthracene	FS	3	0	9.8	9.9	4.9	0.029
Little White Salmon River	Semivolatiles	Anthracene	WB	3	0	9.3	9.6	4.7	0.076
Little White Salmon River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.8	9.9	4.9	0.029
Little White Salmon River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	9.3	9.6	4.7	0.076
Little White Salmon River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.8	9.9	4.9	0.029
Little White Salmon River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	9.3	9.6	4.7	0.076
Little White Salmon River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.8	9.9	4.9	0.029
Little White Salmon River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	9.3	9.6	4.7	0.076
Little White Salmon River	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.5	9.9	4.9	0.10
Little White Salmon River	Semivolatiles	Benzo(a)anthracene	WB	3	0	9.6	9.7	4.8	0.029
Little White Salmon River	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.5	9.9	4.9	0.10
Little White Salmon River	Semivolatiles	Benzo(a)pyrene	WB	3	0	9.6	9.7	4.8	0.029
Little White Salmon River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	19	20	9.7	0.20
Little White Salmon River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	19	19	9.6	0.058
Little White Salmon River	Semivolatiles	Benzo[b]fluoranthene	FS	3	0	9.5	9.9	4.9	0.10
Little White Salmon River	Semivolatiles	Benzo[b]fluoranthene	WB	3	0	9.6	9.7	4.8	0.029
Little White Salmon River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.5	9.9	4.9	0.10
Little White Salmon River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	9.6	9.7	4.8	0.029
Little White Salmon River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	20	20	9.8	0.029
Little White Salmon River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	19	19	9.5	0.15
Little White Salmon River	Semivolatiles	Chrysene	FS	3	0	9.5	9.9	4.9	0.10
Little White Salmon River	Semivolatiles	Chrysene	WB	3	0	9.6	9.7	4.8	0.029
Little White Salmon River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	19	20	9.7	0.20
Little White Salmon River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	19	19	9.6	0.058
Little White Salmon River	Semivolatiles	Dibenzofuran	FS	3	0	9.8	9.9	4.9	0.029
Little White Salmon River	Semivolatiles	Dibenzofuran	WB	3	0	9.3	9.6	4.7	0.076
Little White Salmon River	Semivolatiles	Fluoranthene	FS	3	0	20	20	9.8	0.029
Little White Salmon River	Semivolatiles	Fluoranthene	WB	3	0	19	19	9.5	0.15
Little White Salmon River	Semivolatiles	9H-Fluorene	FS	3	0	9.8	9.9	4.9	0.029
Little White Salmon River	Semivolatiles	9H-Fluorene	WB	3	0	9.3	9.6	4.7	0.076
Little White Salmon River	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.8	9.9	4.9	0.029
Little White Salmon River	Semivolatiles	Hexachlorobutadiene	WB	3	0	9.3	9.6	4.7	0.076
Little White Salmon River	Semivolatiles	Hexachloroethane	FS	3	0	9.8	9.9	4.9	0.029
Little White Salmon River	Semivolatiles	Hexachloroethane	WB	3	0	9.3	9.6	4.7	0.076
Little White Salmon River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	19	20	9.7	0.20
Little White Salmon River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	19	19	9.6	0.058
Little White Salmon River	Semivolatiles	Naphthalene	FS	3	0	20	40	16	5.2
Little White Salmon River	Semivolatiles	Naphthalene	WB	3	0	37	55	24	5.1

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Little White Salmon River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.8	9.9	4.9	0.029
Little White Salmon River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	9.3	9.6	4.7	0.076
Little White Salmon River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.8	11	5.1	0.40
Little White Salmon River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	9.3	9.6	4.7	0.076
Little White Salmon River	Semivolatiles	Nitrobenzene	FS	3	0	9.8	9.9	4.9	0.029
Little White Salmon River	Semivolatiles	Nitrobenzene	WB	3	0	9.3	9.6	4.7	0.076
Little White Salmon River	Semivolatiles	Phenanthrene	FS	3	0	9.8	9.9	4.9	0.029
Little White Salmon River	Semivolatiles	Phenanthrene	WB	3	0	9.3	9.6	4.7	0.076
Little White Salmon River	Semivolatiles	Pyrene	FS	3	0	19	20	9.7	0.20
Little White Salmon River	Semivolatiles	Pyrene	WB	3	0	19	19	9.6	0.058
Little White Salmon River	Semivolatiles	Retene	FS	3	0	19	20	9.7	0.20
Little White Salmon River	Semivolatiles	Retene	WB	3	0	19	19	9.6	0.058
Umatilla River	Dioxin/furans	2,3,7,8-TCDD	E	3	1	0.000010	0.000040	0.000018	0.000013
Umatilla River	Dioxin/furans	2,3,7,8-TCDD	FS	3	0	0.000020	0.000040	0.000015	0.0000050
Umatilla River	Dioxin/furans	2,3,7,8-TCDD	WB	3	1	0.000030	0.000040	0.000025	0.000013
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDD	E	3	3	0.00014	0.00015	0.00015	0.0000058
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000020	0.00018	0.00011	0.000087
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	2	0.000030	0.00021	0.00013	0.00010
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDD	E	3	2	0.000020	0.00012	0.000077	0.000059
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	1	0.000020	0.00013	0.000053	0.000067
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	3	0.00011	0.00014	0.00012	0.000015
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDD	E	3	2	0.000020	0.000090	0.000053	0.000040
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	2	0.000020	0.000080	0.000053	0.000038
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	1	0.000040	0.000080	0.000040	0.000035
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDD	E	3	2	0.000030	0.000050	0.000028	0.0000029
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000040	0.000060	0.000040	0.000020
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000040	0.000050	0.000040	0.000017
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	E	3	2	0.00013	0.00014	0.00011	0.000041
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.00013	0.00057	0.00028	0.00025
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	2	0.000080	0.00018	0.00013	0.000078
Umatilla River	Dioxin/furans	OCDD	E	3	3	0.00024	0.00039	0.00034	0.000087
Umatilla River	Dioxin/furans	OCDD	FS	3	1	0.000020	0.0027	0.00090	0.0015
Umatilla River	Dioxin/furans	OCDD	WB	3	3	0.00022	0.00030	0.00027	0.000044
Umatilla River	Dioxin/furans	2,3,7,8-TCDF	E	3	3	0.00036	0.00046	0.00043	0.000058
Umatilla River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00052	0.00066	0.00060	0.000072
Umatilla River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00061	0.00073	0.00067	0.000060
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDF	E	3	0	0.000020	0.000030	0.000013	0.0000029
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	1	0.000030	0.00012	0.000052	0.000059
Umatilla River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.00011	0.00014	0.00012	0.000015
Umatilla River	Dioxin/furans	2,3,4,7,8-PeCDF	E	3	2	0.000030	0.000090	0.000055	0.000038
Umatilla River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	1	0.000020	0.00011	0.000047	0.000055
Umatilla River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	1	0.000030	0.00017	0.000067	0.000089
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDF	E	3	0	0.000010	0.000040	0.000013	0.0000076
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000020	0.000030	0.000012	0.0000029
Umatilla River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	0	0.000030	0.000040	0.000017	0.0000029
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDF	E	3	1	0.000020	0.000040	0.000018	0.0000029
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	2	0.000030	0.000050	0.000035	0.000018
Umatilla River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	2	0.000040	0.000050	0.000040	0.000017
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDF	E	3	0	0.000010	0.000040	0.000013	0.0000076
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	2	0.000020	0.000070	0.000047	0.000032
Umatilla River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	1	0.000030	0.000070	0.000035	0.000030
Umatilla River	Dioxin/furans	2,3,4,6,7,8-HxCDF	E	3	3	0.00013	0.00014	0.00014	0.0000058
Umatilla River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	3	0.00013	0.00016	0.00014	0.000015
Umatilla River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00015	0.00017	0.00016	0.000010
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	E	3	1	0.000030	0.000060	0.000030	0.000026
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000050	0.00020	0.00010	0.000089
Umatilla River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	3	0.000080	0.000090	0.000087	0.0000058
Umatilla River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	E	3	0	0.000020	0.000030	0.000013	0.0000029
Umatilla River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000030	0.000050	0.000018	0.0000058
Umatilla River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000030	0.000060	0.000020	0.0000087
Umatilla River	Dioxin/furans	OCDF	E	3	0	0.000030	0.000060	0.000020	0.0000087
Umatilla River	Dioxin/furans	OCDF	FS	3	0	0.000040	0.000050	0.000023	0.0000029
Umatilla River	Dioxin/furans	OCDF	WB	3	0	0.000050	0.000060	0.000027	0.0000029
Umatilla River	Guaiaacols/Phenols	4-Chloroguaiacol	E	3	0	750	2,500	700	470
Umatilla River	Guaiaacols/Phenols	4-Chloroguaiacol	FS	3	0	850	960	450	30
Umatilla River	Guaiaacols/Phenols	4-Chloroguaiacol	WB	3	0	810	960	440	37
Umatilla River	Guaiaacols/Phenols	3,4-Dichloroguaiacol	E	3	0	750	2,500	700	470
Umatilla River	Guaiaacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	850	960	450	30
Umatilla River	Guaiaacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	810	960	440	37
Umatilla River	Guaiaacols/Phenols	4,5-Dichloroguaiacol	E	3	0	750	2,500	700	470
Umatilla River	Guaiaacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	850	960	450	30
Umatilla River	Guaiaacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	810	960	440	37
Umatilla River	Guaiaacols/Phenols	4,6-Dichloroguaiacol	E	3	0	750	2,500	700	470
Umatilla River	Guaiaacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	850	960	450	30
Umatilla River	Guaiaacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	810	960	440	37
Umatilla River	Guaiaacols/Phenols	3,4,5-Trichloroguaiacol	E	3	0	750	2,500	700	470

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	850	960	450	30
Umatilla River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	810	960	440	37
Umatilla River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	E	3	0	300	990	280	190
Umatilla River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	340	390	180	12
Umatilla River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	320	380	180	15
Umatilla River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	E	3	0	750	2,500	700	470
Umatilla River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	850	960	450	30
Umatilla River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	810	960	440	37
Umatilla River	Guaiacols/Phenols	Tetrachloroguaiacol	E	3	0	300	990	280	190
Umatilla River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	340	390	180	12
Umatilla River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	320	380	180	15
Umatilla River	Guaiacols/Phenols	2-Chlorophenol	E	3	0	300	990	280	190
Umatilla River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	340	390	180	12
Umatilla River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	320	380	180	15
Umatilla River	Guaiacols/Phenols	4-Chloro-3-methylphenol	E	3	0	300	990	280	190
Umatilla River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	340	390	180	12
Umatilla River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	320	380	180	15
Umatilla River	Guaiacols/Phenols	2,4-Dichlorophenol	E	3	0	300	990	280	190
Umatilla River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	340	390	180	12
Umatilla River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	320	380	180	15
Umatilla River	Guaiacols/Phenols	2,4-Dimethylphenol	E	3	0	750	2,500	700	470
Umatilla River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	850	960	450	30
Umatilla River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	810	960	440	37
Umatilla River	Guaiacols/Phenols	2,4,5-Trichlorophenol	E	3	0	300	990	280	190
Umatilla River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	340	390	180	12
Umatilla River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	320	380	180	15
Umatilla River	Guaiacols/Phenols	2,4,6-Trichlorophenol	E	3	0	300	990	280	190
Umatilla River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	340	390	180	12
Umatilla River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	320	380	180	15
Umatilla River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	E	3	0	300	990	280	190
Umatilla River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	340	390	180	12
Umatilla River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	320	380	180	15
Umatilla River	Guaiacols/Phenols	Pentachlorophenol	E	3	0	300	990	280	190
Umatilla River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	340	390	180	12
Umatilla River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	320	380	180	15
Umatilla River	Guaiacols/Phenols	Phenol	E	3	0	300	990	280	190
Umatilla River	Guaiacols/Phenols	Phenol	FS	3	0	360	390	190	7.1
Umatilla River	Guaiacols/Phenols	Phenol	WB	3	0	320	380	180	15
Umatilla River	Metals	Aluminum	E	3	0	1,000	1,000	500	0.00
Umatilla River	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
Umatilla River	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
Umatilla River	Metals	Antimony	E	3	0	50	50	25	0.00
Umatilla River	Metals	Antimony	FS	3	0	50	50	25	0.00
Umatilla River	Metals	Antimony	WB	3	0	50	50	25	0.00
Umatilla River	Metals	Arsenic	E	3	3	490	530	510	21
Umatilla River	Metals	Arsenic	FS	3	3	730	880	810	75
Umatilla River	Metals	Arsenic	WB	3	3	780	890	840	56
Umatilla River	Metals	Barium	E	3	0	200	200	100	0.00
Umatilla River	Metals	Barium	FS	3	0	200	200	100	0.00
Umatilla River	Metals	Barium	WB	3	1	200	290	160	110
Umatilla River	Metals	Beryllium	E	3	0	4.0	4.0	2.0	0.00
Umatilla River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Umatilla River	Metals	Beryllium	WB	3	0	4.0	6.0	2.3	0.58
Umatilla River	Metals	Cadmium	E	3	3	29	32	30	1.5
Umatilla River	Metals	Cadmium	FS	3	3	11	15	13	2.1
Umatilla River	Metals	Cadmium	WB	3	3	120	150	140	14
Umatilla River	Metals	Chromium	E	3	2	100	110	90	35
Umatilla River	Metals	Chromium	FS	3	0	100	100	50	0.00
Umatilla River	Metals	Chromium	WB	3	2	100	160	120	59
Umatilla River	Metals	Cobalt	E	3	3	52	67	58	8.1
Umatilla River	Metals	Cobalt	FS	3	3	3.8	4.6	4.1	0.44
Umatilla River	Metals	Cobalt	WB	3	3	55	220	120	85
Umatilla River	Metals	Copper	E	3	3	6,400	6,600	6,500	95
Umatilla River	Metals	Copper	FS	3	3	800	910	840	68
Umatilla River	Metals	Copper	WB	3	3	1,200	1,600	1,400	180
Umatilla River	Metals	Lead	E	3	1	10	19	9.7	8.1
Umatilla River	Metals	Lead	FS	3	0	10	10	5.0	0.00
Umatilla River	Metals	Lead	WB	3	3	12	14	13	1.2
Umatilla River	Metals	Manganese	E	3	3	1,500	1,600	1,600	50
Umatilla River	Metals	Manganese	FS	3	3	94	100	97	3.6
Umatilla River	Metals	Manganese	WB	3	3	340	400	380	33
Umatilla River	Metals	Mercury	E	3	0	79	92	43	3.3
Umatilla River	Metals	Mercury	FS	3	1	95	130	74	45
Umatilla River	Metals	Mercury	WB	3	2	71	120	80	36
Umatilla River	Metals	Nickel	E	3	3	51	120	90	35
Umatilla River	Metals	Nickel	FS	3	2	30	37	29	12

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Metals	Nickel	WB	3	0	30	30	15	0.00
Umatilla River	Metals	Selenium	E	3	3	3,700	5,500	4,300	980
Umatilla River	Metals	Selenium	FS	3	3	390	430	410	21
Umatilla River	Metals	Selenium	WB	3	3	520	620	570	47
Umatilla River	Metals	Silver	E	3	0	100	100	50	0.00
Umatilla River	Metals	Silver	FS	3	0	100	100	50	0.00
Umatilla River	Metals	Silver	WB	3	0	100	200	67	29
Umatilla River	Metals	Thallium	E	3	0	50	50	25	0.00
Umatilla River	Metals	Thallium	FS	3	0	50	50	25	0.00
Umatilla River	Metals	Thallium	WB	3	0	50	50	25	0.00
Umatilla River	Metals	Vanadium	E	3	0	10	10	5.0	0.00
Umatilla River	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
Umatilla River	Metals	Vanadium	WB	3	2	10	24	14	9.6
Umatilla River	Metals	Zinc	E	3	3	40,000	40,000	40,000	210
Umatilla River	Metals	Zinc	FS	3	3	6,000	6,500	6,300	290
Umatilla River	Metals	Zinc	WB	3	3	21,000	31,000	25,000	5,500
Umatilla River	PCBs	Aroclor 1016	E	3	0	19	38	16	5.5
Umatilla River	PCBs	Aroclor 1016	FS	3	0	35	38	18	0.76
Umatilla River	PCBs	Aroclor 1016	WB	3	0	34	42	19	2.0
Umatilla River	PCBs	Aroclor 1221	E	3	0	19	38	16	5.5
Umatilla River	PCBs	Aroclor 1221	FS	3	0	35	38	18	0.76
Umatilla River	PCBs	Aroclor 1221	WB	3	0	34	42	19	2.0
Umatilla River	PCBs	Aroclor 1232	E	3	0	19	38	16	5.5
Umatilla River	PCBs	Aroclor 1232	FS	3	0	35	38	18	0.76
Umatilla River	PCBs	Aroclor 1232	WB	3	0	34	42	19	2.0
Umatilla River	PCBs	Aroclor 1242	E	3	0	19	38	16	5.5
Umatilla River	PCBs	Aroclor 1242	FS	3	0	35	38	18	0.76
Umatilla River	PCBs	Aroclor 1242	WB	3	0	34	42	19	2.0
Umatilla River	PCBs	Aroclor 1248	E	3	0	19	38	16	5.5
Umatilla River	PCBs	Aroclor 1248	FS	3	0	35	38	18	0.76
Umatilla River	PCBs	Aroclor 1248	WB	3	0	34	42	19	2.0
Umatilla River	PCBs	Aroclor 1254	E	3	3	16	20	18	2.1
Umatilla River	PCBs	Aroclor 1254	FS	3	3	18	24	22	3.2
Umatilla River	PCBs	Aroclor 1254	WB	3	3	19	20	20	0.58
Umatilla River	PCBs	Aroclor 1260	E	3	0	19	38	16	5.5
Umatilla River	PCBs	Aroclor 1260	FS	3	0	35	38	18	0.76
Umatilla River	PCBs	Aroclor 1260	WB	3	0	34	42	19	2.0
Umatilla River	PCBs	PCB 077	E	3	3	0.0095	0.011	0.0100	0.00056
Umatilla River	PCBs	PCB 077	FS	3	3	0.011	0.013	0.012	0.0011
Umatilla River	PCBs	PCB 077	WB	3	3	0.012	0.014	0.013	0.00061
Umatilla River	PCBs	PCB 105	E	3	3	0.17	0.19	0.18	0.0090
Umatilla River	PCBs	PCB 105	FS	3	3	0.22	0.24	0.23	0.0081
Umatilla River	PCBs	PCB 105	WB	3	3	0.23	0.29	0.26	0.029
Umatilla River	PCBs	PCB 114	E	3	3	0.015	0.020	0.017	0.0029
Umatilla River	PCBs	PCB 114	FS	3	3	0.020	0.022	0.021	0.0013
Umatilla River	PCBs	PCB 114	WB	3	3	0.022	0.026	0.025	0.0023
Umatilla River	PCBs	PCB 118	E	3	3	0.40	0.44	0.41	0.023
Umatilla River	PCBs	PCB 118	FS	3	3	0.52	0.56	0.54	0.023
Umatilla River	PCBs	PCB 118	WB	3	3	0.54	0.67	0.61	0.063
Umatilla River	PCBs	PCB 123	E	3	3	0.0049	0.011	0.0080	0.0029
Umatilla River	PCBs	PCB 123	FS	3	3	0.0090	0.013	0.011	0.0022
Umatilla River	PCBs	PCB 123	WB	3	3	0.011	0.016	0.013	0.0025
Umatilla River	PCBs	PCB 126	E	3	2	0.00090	0.0023	0.0017	0.0010
Umatilla River	PCBs	PCB 126	FS	3	3	0.0031	0.0036	0.0033	0.00030
Umatilla River	PCBs	PCB 126	WB	3	3	0.0032	0.0036	0.0034	0.00018
Umatilla River	PCBs	PCB 156	E	3	3	0.024	0.026	0.025	0.0011
Umatilla River	PCBs	PCB 156	FS	3	3	0.043	0.046	0.044	0.0013
Umatilla River	PCBs	PCB 156	WB	3	3	0.041	0.056	0.048	0.0076
Umatilla River	PCBs	PCB 157	E	3	3	0.0070	0.011	0.0086	0.0021
Umatilla River	PCBs	PCB 157	FS	3	3	0.011	0.012	0.012	0.00045
Umatilla River	PCBs	PCB 157	WB	3	3	0.011	0.015	0.013	0.0019
Umatilla River	PCBs	PCB 167	E	3	3	0.016	0.018	0.017	0.00089
Umatilla River	PCBs	PCB 167	FS	3	3	0.029	0.030	0.029	0.00091
Umatilla River	PCBs	PCB 167	WB	3	3	0.028	0.034	0.031	0.0032
Umatilla River	PCBs	PCB 169	E	3	0	0.0010	0.0010	0.00050	0.00
Umatilla River	PCBs	PCB 169	FS	3	0	0.0010	0.0012	0.00053	0.000046
Umatilla River	PCBs	PCB 169	WB	3	0	0.0010	0.0011	0.00052	0.000029
Umatilla River	PCBs	PCB 170	E	3	3	0.047	0.051	0.049	0.0021
Umatilla River	PCBs	PCB 170	FS	3	3	0.081	0.100	0.091	0.0096
Umatilla River	PCBs	PCB 170	WB	3	3	0.074	0.098	0.089	0.013
Umatilla River	PCBs	PCB 180	E	3	3	0.13	0.14	0.14	0.0029
Umatilla River	PCBs	PCB 180	FS	3	3	0.24	0.28	0.26	0.021
Umatilla River	PCBs	PCB 180	WB	3	3	0.23	0.30	0.27	0.037
Umatilla River	PCBs	PCB 189	E	3	3	0.0013	0.0017	0.0015	0.00020
Umatilla River	PCBs	PCB 189	FS	3	3	0.0028	0.0032	0.0030	0.00018
Umatilla River	PCBs	PCB 189	WB	3	3	0.0026	0.0034	0.0030	0.00040

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Pesticides	Aldrin	E	3	0	1.9	3.8	1.6	0.55
Umatilla River	Pesticides	Aldrin	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	Aldrin	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Pesticides	Alpha-BHC	E	3	0	1.9	3.8	1.6	0.55
Umatilla River	Pesticides	Alpha-BHC	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	Alpha-BHC	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Pesticides	Alpha-Chlordene	E	3	0	1.9	3.8	1.6	0.55
Umatilla River	Pesticides	Alpha-Chlordene	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	Alpha-Chlordene	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Pesticides	Beta-BHC	E	3	0	1.9	3.8	1.6	0.55
Umatilla River	Pesticides	Beta-BHC	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	Beta-BHC	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Pesticides	cis-Chlordane (alpha-Chloro	E	3	0	1.9	3.8	1.6	0.55
Umatilla River	Pesticides	cis-Chlordane (alpha-Chloro	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	cis-Chlordane (alpha-Chloro	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Pesticides	cis-Nonachlor	E	3	0	1.9	3.8	1.6	0.55
Umatilla River	Pesticides	cis-Nonachlor	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	cis-Nonachlor	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Pesticides	DDD-o,p'	E	3	0	1.9	3.8	1.6	0.55
Umatilla River	Pesticides	DDD-o,p'	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	DDD-o,p'	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Pesticides	DDE-o,p'	E	3	0	1.9	3.8	1.6	0.55
Umatilla River	Pesticides	DDE-o,p'	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	DDE-o,p'	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Pesticides	DDT-o,p'	E	3	0	1.9	3.8	1.6	0.55
Umatilla River	Pesticides	DDT-o,p'	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	DDT-o,p'	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Pesticides	DDD-p,p'	E	3	3	2.5	3.1	2.8	0.30
Umatilla River	Pesticides	DDD-p,p'	FS	3	3	2.6	3.0	2.8	0.21
Umatilla River	Pesticides	DDD-p,p'	WB	3	2	2.7	4.2	2.6	0.46
Umatilla River	Pesticides	DDE-p,p'	E	3	3	9.7	10	9.8	0.15
Umatilla River	Pesticides	DDE-p,p'	FS	3	3	9.9	13	11	1.6
Umatilla River	Pesticides	DDE-p,p'	WB	3	3	11	13	12	1.2
Umatilla River	Pesticides	DDT-p,p'	E	3	3	4.0	4.2	4.1	0.10
Umatilla River	Pesticides	DDT-p,p'	FS	3	3	4.0	5.0	4.6	0.55
Umatilla River	Pesticides	DDT-p,p'	WB	3	3	3.9	5.8	4.6	1.0
Umatilla River	Pesticides	DDMU	E	3	0	1.9	3.8	1.6	0.55
Umatilla River	Pesticides	DDMU	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	DDMU	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Pesticides	Delta-BHC	E	3	0	1.9	3.8	1.6	0.55
Umatilla River	Pesticides	Delta-BHC	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	Delta-BHC	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Pesticides	Endosulfan Sulfate	E	3	0	0.00	0.00	0.00	na
Umatilla River	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	0.00	na
Umatilla River	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	0.00	na
Umatilla River	Pesticides	Gamma-Chlordane	E	3	0	1.9	3.8	1.6	0.55
Umatilla River	Pesticides	Gamma-Chlordane	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	Gamma-Chlordane	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Pesticides	gamma-Chlordene	E	3	0	1.9	3.8	1.6	0.55
Umatilla River	Pesticides	gamma-Chlordene	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	gamma-Chlordene	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Pesticides	Heptachlor	E	3	0	1.9	3.8	1.6	0.55
Umatilla River	Pesticides	Heptachlor	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	Heptachlor	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Pesticides	Heptachlor Epoxide	E	3	0	1.9	3.8	1.6	0.55
Umatilla River	Pesticides	Heptachlor Epoxide	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	Heptachlor Epoxide	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Pesticides	Hexachlorobenzene	E	3	3	3.4	3.8	3.6	0.21
Umatilla River	Pesticides	Hexachlorobenzene	FS	3	3	2.7	3.5	3.1	0.40
Umatilla River	Pesticides	Hexachlorobenzene	WB	3	3	2.7	3.3	3.0	0.30
Umatilla River	Pesticides	Lindane	E	3	1	1.9	3.8	1.6	0.55
Umatilla River	Pesticides	Lindane	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	Lindane	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Pesticides	Mirex	E	3	0	1.9	3.8	1.6	0.55
Umatilla River	Pesticides	Mirex	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	Mirex	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Pesticides	Oxychlordane	E	3	0	1.9	3.8	1.6	0.55
Umatilla River	Pesticides	Oxychlordane	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	Oxychlordane	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Pesticides	Pentachloroanisol	E	3	0	1.9	3.8	1.6	0.55
Umatilla River	Pesticides	Pentachloroanisol	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	Pentachloroanisol	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Pesticides	Toxaphene	E	3	0	56	110	46	16
Umatilla River	Pesticides	Toxaphene	FS	3	0	110	110	55	0.00
Umatilla River	Pesticides	Toxaphene	WB	3	0	100	120	55	5.0
Umatilla River	Pesticides	trans-Nonachlor	E	3	1	3.2	3.8	2.3	0.75

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Pesticides	trans-Nonachlor	FS	3	0	3.5	3.8	1.8	0.076
Umatilla River	Pesticides	trans-Nonachlor	WB	3	0	3.4	4.2	1.9	0.20
Umatilla River	Semivolatiles	1,2,4-Trichlorobenzene	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	1,2-Diphenylhydrazine	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	2,4-Dinitrotoluene	E	3	0	19	74	24	14
Umatilla River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	17	19	9.1	0.60
Umatilla River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	18	81	20	18
Umatilla River	Semivolatiles	2,6-Dinitrotoluene	E	3	0	39	150	48	28
Umatilla River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	34	39	18	1.2
Umatilla River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	36	160	39	36
Umatilla River	Semivolatiles	2-Chloronaphthalene	E	3	0	19	74	24	14
Umatilla River	Semivolatiles	2-Chloronaphthalene	FS	3	0	17	19	9.1	0.60
Umatilla River	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	81	20	18
Umatilla River	Semivolatiles	4-Bromophenyl-Phenylether	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	4-Chlorophenyl-Phenylether	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	Acenaphthene	E	3	1	26	74	29	6.9
Umatilla River	Semivolatiles	Acenaphthene	FS	3	0	17	19	9.1	0.60
Umatilla River	Semivolatiles	Acenaphthene	WB	3	0	18	81	20	18
Umatilla River	Semivolatiles	Acenaphthylene	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	Acenaphthylene	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	Acenaphthylene	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	Anthracene	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	Anthracene	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	Anthracene	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	Benzene, 1,2-dichloro-	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	Benzene, 1,3-dichloro-	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	Benzene, 1,4-dichloro-	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	Benzo(a)anthracene	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	Benzo(a)anthracene	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	Benzo(a)pyrene	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	Benzo(a)pyrene	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	Benzo(g,h,i)perylene	E	3	0	19	74	24	14
Umatilla River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	17	19	9.1	0.60
Umatilla River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	81	20	18
Umatilla River	Semivolatiles	Benzo[b]Fluoranthene	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	Benzo[k]fluoranthene	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	bis(2-Chloroisopropyl)ether	E	3	0	19	74	24	14
Umatilla River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	17	19	9.1	0.60
Umatilla River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	81	20	18
Umatilla River	Semivolatiles	Chrysene	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	Chrysene	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	Chrysene	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	Dibenz[a,h]anthracene	E	3	0	19	74	24	14
Umatilla River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	17	19	9.1	0.60
Umatilla River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	81	20	18
Umatilla River	Semivolatiles	Dibenzofuran	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	Dibenzofuran	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	Dibenzofuran	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	Fluoranthene	E	3	0	19	74	24	14
Umatilla River	Semivolatiles	Fluoranthene	FS	3	0	17	19	9.1	0.60
Umatilla River	Semivolatiles	Fluoranthene	WB	3	0	18	81	20	18
Umatilla River	Semivolatiles	9H-Fluorene	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	9H-Fluorene	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	9H-Fluorene	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	Hexachlorobutadiene	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	Hexachlorobutadiene	FS	3	0	8.5	9.6	4.5	0.28

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Umatilla River	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	Hexachloroethane	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	Hexachloroethane	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	Hexachloroethane	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	Indeno(1,2,3-cd)pyrene	E	3	0	19	74	24	14
Umatilla River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	17	19	9.1	0.60
Umatilla River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	81	20	18
Umatilla River	Semivolatiles	Naphthalene	E	3	0	44	110	34	18
Umatilla River	Semivolatiles	Naphthalene	FS	3	0	33	45	19	3.3
Umatilla River	Semivolatiles	Naphthalene	WB	3	0	33	170	42	38
Umatilla River	Semivolatiles	Naphthalene, 1-methyl-	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	Naphthalene, 2-methyl-	E	3	0	14	37	13	5.9
Umatilla River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	9.6	40	10	8.7
Umatilla River	Semivolatiles	Nitrobenzene	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	Nitrobenzene	FS	3	0	8.5	9.6	4.5	0.28
Umatilla River	Semivolatiles	Nitrobenzene	WB	3	0	8.9	40	9.8	9.0
Umatilla River	Semivolatiles	Phenanthrene	E	3	0	9.7	37	12	6.9
Umatilla River	Semivolatiles	Phenanthrene	FS	3	0	8.8	13	5.5	0.97
Umatilla River	Semivolatiles	Phenanthrene	WB	3	0	9.6	40	10	8.5
Umatilla River	Semivolatiles	Pyrene	E	3	0	19	74	24	14
Umatilla River	Semivolatiles	Pyrene	FS	3	0	17	19	9.1	0.60
Umatilla River	Semivolatiles	Pyrene	WB	3	0	18	81	20	18
Umatilla River	Semivolatiles	Retene	E	3	0	19	74	24	14
Umatilla River	Semivolatiles	Retene	FS	3	0	17	19	9.1	0.60
Umatilla River	Semivolatiles	Retene	WB	3	0	18	81	20	18
Wenatchee River	Dioxin/furans	2,3,7,8-TCDD	FS	3	3	0.000030	0.000050	0.000040	0.000010
Wenatchee River	Dioxin/furans	2,3,7,8-TCDD	WB	3	1	0.000020	0.000040	0.000020	0.000010
Wenatchee River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	3	0.000010	0.000013	0.000012	0.000017
Wenatchee River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	2	0.000030	0.00017	0.000098	0.000078
Wenatchee River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	1	0.000010	0.000040	0.000017	0.000020
Wenatchee River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	1	0.000020	0.000060	0.000030	0.000020
Wenatchee River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.000080	0.00012	0.00010	0.000020
Wenatchee River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	1	0.000010	0.00010	0.000045	0.000049
Wenatchee River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000010	0.000060	0.000023	0.000032
Wenatchee River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	3	0.000060	0.00012	0.000087	0.000031
Wenatchee River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.000080	0.00016	0.00012	0.000040
Wenatchee River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00016	0.00020	0.00018	0.000021
Wenatchee River	Dioxin/furans	OCDD	FS	3	2	0.000030	0.00044	0.00019	0.00022
Wenatchee River	Dioxin/furans	OCDD	WB	3	3	0.00034	0.00047	0.00041	0.000067
Wenatchee River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00065	0.00069	0.00067	0.000021
Wenatchee River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00076	0.00085	0.00080	0.000046
Wenatchee River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.00012	0.00013	0.00013	0.0000058
Wenatchee River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.00011	0.00018	0.00015	0.000038
Wenatchee River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	1	0.000020	0.00017	0.000063	0.000092
Wenatchee River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00014	0.00023	0.00019	0.000047
Wenatchee River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	1	0.000020	0.000050	0.000025	0.000015
Wenatchee River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	2	0.000050	0.000060	0.000048	0.000020
Wenatchee River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000030	0.000060	0.000047	0.000015
Wenatchee River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	2	0.000050	0.000070	0.000052	0.000024
Wenatchee River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	1	0.000020	0.000060	0.000027	0.000029
Wenatchee River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	2	0.000050	0.000080	0.000062	0.000032
Wenatchee River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	2	0.000020	0.00013	0.000067	0.000060
Wenatchee River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	1	0.000020	0.000080	0.000038	0.000037
Wenatchee River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000030	0.000050	0.000035	0.000018
Wenatchee River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000080	0.000090	0.000072	0.000024
Wenatchee River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	2	0.000030	0.000080	0.000042	0.000034
Wenatchee River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	2	0.000070	0.000090	0.000065	0.000018
Wenatchee River	Dioxin/furans	OCDF	FS	3	1	0.000030	0.00021	0.000087	0.00011
Wenatchee River	Dioxin/furans	OCDF	WB	3	2	0.00014	0.00023	0.00015	0.000078
Wenatchee River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	920	1,000	480	18
Wenatchee River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	910	1,000	480	22
Wenatchee River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	920	1,000	480	18
Wenatchee River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	910	1,000	480	22
Wenatchee River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	920	1,000	480	18
Wenatchee River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	910	1,000	480	22
Wenatchee River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	920	1,000	480	18
Wenatchee River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	910	1,000	480	22
Wenatchee River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	920	1,000	480	18
Wenatchee River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	910	1,000	480	22
Wenatchee River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	370	400	190	7.3
Wenatchee River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	360	400	190	8.8
Wenatchee River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	920	1,000	480	18
Wenatchee River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	910	1,000	480	22

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Wenatchee River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	370	400	190	7.3
Wenatchee River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	360	400	190	8.8
Wenatchee River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	370	400	190	7.3
Wenatchee River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	360	400	190	8.8
Wenatchee River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	370	400	190	7.3
Wenatchee River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	360	400	190	8.8
Wenatchee River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	370	400	190	7.3
Wenatchee River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	360	400	190	8.8
Wenatchee River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	920	1,000	480	18
Wenatchee River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	910	1,000	480	22
Wenatchee River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	370	400	190	7.3
Wenatchee River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	360	400	190	8.8
Wenatchee River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	370	400	190	7.3
Wenatchee River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	360	400	190	8.8
Wenatchee River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	370	400	190	7.3
Wenatchee River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	360	400	190	8.8
Wenatchee River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	370	400	190	7.3
Wenatchee River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	360	400	190	8.8
Wenatchee River	Guaiacols/Phenols	Phenol	FS	3	0	370	400	190	7.3
Wenatchee River	Guaiacols/Phenols	Phenol	WB	3	0	360	400	190	8.8
Wenatchee River	Metals	Aluminum	FS	3	2	1,000	2,500	1,400	1,000
Wenatchee River	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
Wenatchee River	Metals	Antimony	FS	3	0	50	50	25	0.00
Wenatchee River	Metals	Antimony	WB	3	0	50	50	25	0.00
Wenatchee River	Metals	Arsenic	FS	3	3	730	1,000	850	170
Wenatchee River	Metals	Arsenic	WB	3	3	730	880	810	78
Wenatchee River	Metals	Barium	FS	3	0	200	200	100	0.00
Wenatchee River	Metals	Barium	WB	3	0	200	200	100	0.00
Wenatchee River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Wenatchee River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Wenatchee River	Metals	Cadmium	FS	3	3	8.6	11	10	1.4
Wenatchee River	Metals	Cadmium	WB	3	3	150	170	160	12
Wenatchee River	Metals	Chromium	FS	3	0	100	100	50	0.00
Wenatchee River	Metals	Chromium	WB	3	3	100	140	120	21
Wenatchee River	Metals	Cobalt	FS	3	0	1.0	1.0	0.50	0.00
Wenatchee River	Metals	Cobalt	WB	3	3	59	97	83	21
Wenatchee River	Metals	Copper	FS	3	3	720	820	780	50
Wenatchee River	Metals	Copper	WB	3	3	1,400	1,600	1,400	100
Wenatchee River	Metals	Lead	FS	3	0	10	10	5.0	0.00
Wenatchee River	Metals	Lead	WB	3	3	12	23	18	5.5
Wenatchee River	Metals	Manganese	FS	3	3	81	110	91	15
Wenatchee River	Metals	Manganese	WB	3	3	370	390	390	11
Wenatchee River	Metals	Mercury	FS	3	1	110	230	110	97
Wenatchee River	Metals	Mercury	WB	3	0	89	110	50	4.5
Wenatchee River	Metals	Nickel	FS	3	3	32	53	42	11
Wenatchee River	Metals	Nickel	WB	3	3	31	53	39	12
Wenatchee River	Metals	Selenium	FS	3	3	320	320	320	0.00
Wenatchee River	Metals	Selenium	WB	3	3	480	590	530	60
Wenatchee River	Metals	Silver	FS	3	0	100	100	50	0.00
Wenatchee River	Metals	Silver	WB	3	0	100	100	50	0.00
Wenatchee River	Metals	Thallium	FS	3	0	50	50	25	0.00
Wenatchee River	Metals	Thallium	WB	3	0	50	50	25	0.00
Wenatchee River	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
Wenatchee River	Metals	Vanadium	WB	3	2	10	13	10	4.4
Wenatchee River	Metals	Zinc	FS	3	3	5,900	6,600	6,400	380
Wenatchee River	Metals	Zinc	WB	3	3	25,000	27,000	27,000	1,100
Wenatchee River	PCBs	Aroclor 1016	FS	3	0	17	19	9.2	0.58
Wenatchee River	PCBs	Aroclor 1016	WB	3	0	18	19	9.3	0.29
Wenatchee River	PCBs	Aroclor 1221	FS	3	0	17	19	9.2	0.58
Wenatchee River	PCBs	Aroclor 1221	WB	3	0	18	19	9.3	0.29
Wenatchee River	PCBs	Aroclor 1232	FS	3	0	17	19	9.2	0.58
Wenatchee River	PCBs	Aroclor 1232	WB	3	0	18	19	9.3	0.29
Wenatchee River	PCBs	Aroclor 1242	FS	3	0	17	19	9.2	0.58
Wenatchee River	PCBs	Aroclor 1242	WB	3	0	18	19	9.3	0.29
Wenatchee River	PCBs	Aroclor 1248	FS	3	0	17	19	9.2	0.58
Wenatchee River	PCBs	Aroclor 1248	WB	3	0	18	19	9.3	0.29
Wenatchee River	PCBs	Aroclor 1254	FS	3	3	13	17	15	2.1
Wenatchee River	PCBs	Aroclor 1254	WB	3	3	17	19	18	1.2
Wenatchee River	PCBs	Aroclor 1260	FS	3	0	17	19	9.2	0.58
Wenatchee River	PCBs	Aroclor 1260	WB	3	0	18	19	9.3	0.29
Wenatchee River	PCBs	PCB 077	FS	3	3	0.011	0.013	0.012	0.0012
Wenatchee River	PCBs	PCB 077	WB	3	3	0.014	0.017	0.016	0.0017
Wenatchee River	PCBs	PCB 105	FS	3	3	0.19	0.23	0.21	0.021
Wenatchee River	PCBs	PCB 105	WB	3	3	0.24	0.28	0.26	0.019
Wenatchee River	PCBs	PCB 114	FS	3	3	0.018	0.022	0.020	0.0019
Wenatchee River	PCBs	PCB 114	WB	3	3	0.022	0.022	0.022	0.00036

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Wenatchee River	PCBs	PCB 118	FS	3	3	0.44	0.54	0.50	0.050
Wenatchee River	PCBs	PCB 118	WB	3	3	0.55	0.63	0.59	0.040
Wenatchee River	PCBs	PCB 123	FS	3	3	0.0084	0.012	0.0097	0.0020
Wenatchee River	PCBs	PCB 123	WB	3	3	0.0072	0.013	0.011	0.0030
Wenatchee River	PCBs	PCB 126	FS	3	2	0.00081	0.0046	0.0025	0.0021
Wenatchee River	PCBs	PCB 126	WB	3	2	0.00052	0.0036	0.0024	0.0019
Wenatchee River	PCBs	PCB 156	FS	3	3	0.035	0.044	0.039	0.0041
Wenatchee River	PCBs	PCB 156	WB	3	3	0.042	0.051	0.047	0.0044
Wenatchee River	PCBs	PCB 157	FS	3	3	0.0099	0.012	0.011	0.00094
Wenatchee River	PCBs	PCB 157	WB	3	3	0.0100	0.014	0.012	0.0019
Wenatchee River	PCBs	PCB 167	FS	3	3	0.025	0.030	0.028	0.0026
Wenatchee River	PCBs	PCB 167	WB	3	3	0.028	0.033	0.030	0.0029
Wenatchee River	PCBs	PCB 169	FS	3	0	0.0010	0.0012	0.00055	0.000043
Wenatchee River	PCBs	PCB 169	WB	3	0	0.0010	0.0011	0.00052	0.000032
Wenatchee River	PCBs	PCB 170	FS	3	3	0.066	0.078	0.072	0.0061
Wenatchee River	PCBs	PCB 170	WB	3	3	0.071	0.085	0.077	0.0073
Wenatchee River	PCBs	PCB 180	FS	3	3	0.22	0.27	0.25	0.023
Wenatchee River	PCBs	PCB 180	WB	3	3	0.24	0.28	0.26	0.021
Wenatchee River	PCBs	PCB 189	FS	3	2	0.0010	0.0036	0.0022	0.0016
Wenatchee River	PCBs	PCB 189	WB	3	3	0.0026	0.0033	0.0029	0.00034
Wenatchee River	Pesticides	Aldrin	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	Aldrin	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	Alpha-BHC	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	Alpha-BHC	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	Alpha-Chlordane	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	Alpha-Chlordane	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	Beta-BHC	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	Beta-BHC	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	cis-Chlordane (alpha-Chloro	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	cis-Chlordane (alpha-Chloro	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	cis-Nonachlor	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	cis-Nonachlor	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	DDD-o,p'	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	DDD-o,p'	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	DDE-o,p'	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	DDE-o,p'	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	DDT-o,p'	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	DDT-o,p'	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	DDD-p,p'	FS	3	3	1.5	3.9	3.0	1.3
Wenatchee River	Pesticides	DDD-p,p'	WB	3	2	1.8	5.5	2.8	2.4
Wenatchee River	Pesticides	DDE-p,p'	FS	3	3	11	15	13	2.1
Wenatchee River	Pesticides	DDE-p,p'	WB	3	3	15	18	17	1.5
Wenatchee River	Pesticides	DDT-p,p'	FS	3	3	4.8	5.3	5.0	0.29
Wenatchee River	Pesticides	DDT-p,p'	WB	3	3	4.2	6.2	5.1	1.0
Wenatchee River	Pesticides	DDMU	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	DDMU	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	Delta-BHC	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	Delta-BHC	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	Endosulfan Sulfate	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	Endosulfan Sulfate	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	Gamma-Chlordane	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	Gamma-Chlordane	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	gamma-Chlordane	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	gamma-Chlordane	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	Heptachlor	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	Heptachlor	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	Heptachlor Epoxide	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	Heptachlor Epoxide	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	Hexachlorobenzene	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	Hexachlorobenzene	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	Lindane	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	Lindane	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	Mirex	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	Mirex	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	Oxychlordane	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	Oxychlordane	WB	3	0	1.8	1.9	0.93	0.029
Wenatchee River	Pesticides	Pentachloroanisol	FS	3	0	1.7	1.9	0.92	0.058
Wenatchee River	Pesticides	Pentachloroanisol	WB	3	1	0.94	1.9	0.93	0.026
Wenatchee River	Pesticides	Toxaphene	FS	3	0	51	58	28	1.9
Wenatchee River	Pesticides	Toxaphene	WB	3	0	55	56	28	0.29
Wenatchee River	Pesticides	trans-Nonachlor	FS	3	3	2.4	2.9	2.7	0.26
Wenatchee River	Pesticides	trans-Nonachlor	WB	3	3	3.4	3.9	3.6	0.26
Wenatchee River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.2	10	4.8	0.20
Wenatchee River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.2	10	4.8	0.20
Wenatchee River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	9.1	10	4.8	0.23

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Wenatchee River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	18	20	9.6	0.38
Wenatchee River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	18	20	9.5	0.45
Wenatchee River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	37	40	19	0.73
Wenatchee River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	36	40	19	0.88
Wenatchee River	Semivolatiles	2-Chloronaphthalene	FS	3	0	18	20	9.6	0.38
Wenatchee River	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	20	9.5	0.45
Wenatchee River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.2	10	4.8	0.20
Wenatchee River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.2	10	4.8	0.20
Wenatchee River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	Acenaphthene	FS	3	0	18	20	9.6	0.38
Wenatchee River	Semivolatiles	Acenaphthene	WB	3	1	18	24	14	8.1
Wenatchee River	Semivolatiles	Acenaphthylene	FS	3	0	9.2	10	4.8	0.20
Wenatchee River	Semivolatiles	Acenaphthylene	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	Anthracene	FS	3	0	9.2	10	4.8	0.20
Wenatchee River	Semivolatiles	Anthracene	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.2	10	4.8	0.20
Wenatchee River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.2	10	4.8	0.20
Wenatchee River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.2	10	4.8	0.20
Wenatchee River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.2	10	4.8	0.20
Wenatchee River	Semivolatiles	Benzo(a)anthracene	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.2	9.7	4.7	0.14
Wenatchee River	Semivolatiles	Benzo(a)pyrene	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	18	19	9.3	0.28
Wenatchee River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	20	9.5	0.45
Wenatchee River	Semivolatiles	Benzo[b]fluoranthene	FS	3	0	9.2	9.7	4.7	0.14
Wenatchee River	Semivolatiles	Benzo[b]fluoranthene	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.2	9.7	4.7	0.14
Wenatchee River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	18	20	9.6	0.38
Wenatchee River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	20	9.5	0.45
Wenatchee River	Semivolatiles	Chrysene	FS	3	0	9.2	10	4.8	0.20
Wenatchee River	Semivolatiles	Chrysene	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	18	19	9.3	0.28
Wenatchee River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	20	9.5	0.45
Wenatchee River	Semivolatiles	Dibenzofuran	FS	3	0	9.2	10	4.8	0.20
Wenatchee River	Semivolatiles	Dibenzofuran	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	Fluoranthene	FS	3	0	18	20	9.6	0.38
Wenatchee River	Semivolatiles	Fluoranthene	WB	3	0	18	20	9.5	0.45
Wenatchee River	Semivolatiles	9H-Fluorene	FS	3	0	9.2	10	4.8	0.20
Wenatchee River	Semivolatiles	9H-Fluorene	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.2	10	4.8	0.20
Wenatchee River	Semivolatiles	Hexachlorobutadiene	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	Hexachloroethane	FS	3	0	9.2	10	4.8	0.20
Wenatchee River	Semivolatiles	Hexachloroethane	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	18	19	9.3	0.28
Wenatchee River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	20	9.5	0.45
Wenatchee River	Semivolatiles	Naphthalene	FS	3	0	30	69	26	10
Wenatchee River	Semivolatiles	Naphthalene	WB	3	0	67	75	35	2.2
Wenatchee River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.2	10	4.8	0.20
Wenatchee River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	2	9.7	14	11	5.1
Wenatchee River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	3	14	16	16	1.2
Wenatchee River	Semivolatiles	Nitrobenzene	FS	3	0	9.2	10	4.8	0.20
Wenatchee River	Semivolatiles	Nitrobenzene	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	Phenanthrene	FS	3	0	9.2	10	4.8	0.20
Wenatchee River	Semivolatiles	Phenanthrene	WB	3	0	9.1	10	4.8	0.23
Wenatchee River	Semivolatiles	Pyrene	FS	3	0	18	20	9.6	0.38
Wenatchee River	Semivolatiles	Pyrene	WB	3	0	18	20	9.5	0.45
Wenatchee River	Semivolatiles	Retene	FS	3	0	18	20	9.6	0.38
Wenatchee River	Semivolatiles	Retene	WB	3	0	18	20	9.5	0.45
Willamette River	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000010	0.000040	0.000018	0.000019
Willamette River	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000010	0.000030	0.000010	0.0000050
Willamette River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000010	0.000060	0.000025	0.000030
Willamette River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.000010	0.000010	0.0000050	0.00
Willamette River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	2	0.000020	0.000020	0.000017	0.0000058
Willamette River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000010	0.000040	0.000010	0.0000087
Willamette River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.000060	0.000080	0.000073	0.000012
Willamette River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	3	0.000090	0.000090	0.000090	1.3E-12
Willamette River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000010	0.000040	0.000028	0.000020
Willamette River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	3	0.000040	0.000070	0.000057	0.000015
Willamette River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.000090	0.00016	0.00012	0.000036
Willamette River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	1	0.000030	0.00019	0.000077	0.000098

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Willamette River	Dioxin/furans	OCDD	FS	3	1	0.000040	0.00023	0.000095	0.00012
Willamette River	Dioxin/furans	OCDD	WB	3	2	0.000010	0.00042	0.00026	0.00022
Willamette River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00051	0.00072	0.00058	0.00012
Willamette River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00069	0.00088	0.00077	0.000098
Willamette River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.000050	0.000080	0.000067	0.000015
Willamette River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	2	0.000040	0.000060	0.000043	0.000021
Willamette River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.000080	0.000090	0.000087	0.0000058
Willamette River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	2	0.000040	0.00013	0.000087	0.000059
Willamette River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000010	0.000040	0.000013	0.0000076
Willamette River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	1	0.000010	0.000030	0.000017	0.000013
Willamette River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	1	0.000010	0.000040	0.000015	0.0000050
Willamette River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	2	0.000020	0.000030	0.000022	0.0000076
Willamette River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000040	0.000013	0.0000076
Willamette River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	1	0.000010	0.000050	0.000020	0.000026
Willamette River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000010	0.000040	0.000013	0.0000076
Willamette River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	1	0.000010	0.000030	0.000013	0.0000076
Willamette River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000010	0.000040	0.000013	0.0000076
Willamette River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000010	0.000070	0.000048	0.000038
Willamette River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000040	0.000013	0.0000076
Willamette River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	1	0.000010	0.000030	0.000013	0.0000076
Willamette River	Dioxin/furans	OCDF	FS	3	2	0.000040	0.000090	0.000052	0.000034
Willamette River	Dioxin/furans	OCDF	WB	3	2	0.000020	0.000070	0.000043	0.000031
Willamette River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	920	990	480	17
Willamette River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	870	960	460	24
Willamette River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	920	990	480	17
Willamette River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	870	960	460	24
Willamette River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	920	990	480	17
Willamette River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	870	960	460	24
Willamette River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	920	990	480	17
Willamette River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	870	960	460	24
Willamette River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	920	990	480	17
Willamette River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	870	960	460	24
Willamette River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	370	390	190	6.9
Willamette River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	350	390	180	9.8
Willamette River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	920	990	480	17
Willamette River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	870	960	460	24
Willamette River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	370	390	190	6.9
Willamette River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	350	390	180	9.8
Willamette River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	370	390	190	6.9
Willamette River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	350	390	180	9.8
Willamette River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	370	390	190	6.9
Willamette River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	350	390	180	9.8
Willamette River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	370	390	190	6.9
Willamette River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	350	390	180	9.8
Willamette River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	920	990	480	17
Willamette River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	870	960	460	24
Willamette River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	370	390	190	6.9
Willamette River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	350	390	180	9.8
Willamette River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	370	390	190	6.9
Willamette River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	350	390	180	9.8
Willamette River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	370	390	190	6.9
Willamette River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	350	390	180	9.8
Willamette River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	370	390	190	6.9
Willamette River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	350	390	180	9.8
Willamette River	Guaiacols/Phenols	Phenol	FS	3	0	370	390	190	6.9
Willamette River	Guaiacols/Phenols	Phenol	WB	3	0	370	540	220	47
Willamette River	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
Willamette River	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
Willamette River	Metals	Antimony	FS	3	0	50	50	25	0.00
Willamette River	Metals	Antimony	WB	3	0	50	50	25	0.00
Willamette River	Metals	Arsenic	FS	3	3	660	1,100	870	220
Willamette River	Metals	Arsenic	WB	3	3	850	1,100	1,000	140
Willamette River	Metals	Barium	FS	3	0	200	200	100	0.00
Willamette River	Metals	Barium	WB	3	0	200	200	100	0.00
Willamette River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Willamette River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Willamette River	Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
Willamette River	Metals	Cadmium	WB	3	3	6.1	8.0	7.2	0.97
Willamette River	Metals	Chromium	FS	3	3	370	420	390	26
Willamette River	Metals	Chromium	WB	3	3	460	540	490	41
Willamette River	Metals	Cobalt	FS	3	3	2.8	4.1	3.3	0.72
Willamette River	Metals	Cobalt	WB	3	3	92	240	170	74
Willamette River	Metals	Copper	FS	3	3	490	560	540	40
Willamette River	Metals	Copper	WB	3	3	1,100	1,400	1,300	170
Willamette River	Metals	Lead	FS	3	0	10	10	5.0	0.00
Willamette River	Metals	Lead	WB	3	0	10	10	5.0	0.00

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Willamette River	Metals	Manganese	FS	3	3	71	74	72	1.5
Willamette River	Metals	Manganese	WB	3	3	270	330	300	30
Willamette River	Metals	Mercury	FS	3	0	90	110	50	5.3
Willamette River	Metals	Mercury	WB	3	0	110	120	57	2.3
Willamette River	Metals	Nickel	FS	3	0	30	30	15	0.00
Willamette River	Metals	Nickel	WB	3	3	570	1,600	970	570
Willamette River	Metals	Selenium	FS	3	3	350	400	380	26
Willamette River	Metals	Selenium	WB	3	3	410	510	450	51
Willamette River	Metals	Silver	FS	3	0	100	100	50	0.00
Willamette River	Metals	Silver	WB	3	0	100	100	50	0.00
Willamette River	Metals	Thallium	FS	3	0	50	50	25	0.00
Willamette River	Metals	Thallium	WB	3	0	50	50	25	0.00
Willamette River	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
Willamette River	Metals	Vanadium	WB	3	3	19	28	23	4.5
Willamette River	Metals	Zinc	FS	3	3	5,000	5,500	5,200	260
Willamette River	Metals	Zinc	WB	3	3	29,000	37,000	32,000	4,500
Willamette River	PCBs	Aroclor 1016	FS	3	0	18	20	9.5	0.50
Willamette River	PCBs	Aroclor 1016	WB	3	0	18	20	9.7	0.58
Willamette River	PCBs	Aroclor 1221	FS	3	0	18	20	9.5	0.50
Willamette River	PCBs	Aroclor 1221	WB	3	0	18	20	9.7	0.58
Willamette River	PCBs	Aroclor 1232	FS	3	0	18	20	9.5	0.50
Willamette River	PCBs	Aroclor 1232	WB	3	0	18	20	9.7	0.58
Willamette River	PCBs	Aroclor 1242	FS	3	0	18	20	9.5	0.50
Willamette River	PCBs	Aroclor 1242	WB	3	0	18	20	9.7	0.58
Willamette River	PCBs	Aroclor 1248	FS	3	0	18	20	9.5	0.50
Willamette River	PCBs	Aroclor 1248	WB	3	0	18	20	9.7	0.58
Willamette River	PCBs	Aroclor 1254	FS	3	3	8.6	12	10	1.7
Willamette River	PCBs	Aroclor 1254	WB	3	3	15	16	16	0.58
Willamette River	PCBs	Aroclor 1260	FS	3	0	18	20	9.5	0.50
Willamette River	PCBs	Aroclor 1260	WB	3	0	18	20	9.7	0.58
Willamette River	PCBs	PCB 077	FS	3	3	0.0070	0.0083	0.0076	0.00066
Willamette River	PCBs	PCB 077	WB	3	3	0.010	0.012	0.011	0.00084
Willamette River	PCBs	PCB 105	FS	3	3	0.15	0.21	0.17	0.034
Willamette River	PCBs	PCB 105	WB	3	3	0.23	0.27	0.24	0.025
Willamette River	PCBs	PCB 114	FS	3	3	0.013	0.019	0.015	0.0032
Willamette River	PCBs	PCB 114	WB	3	3	0.018	0.022	0.019	0.0020
Willamette River	PCBs	PCB 118	FS	3	3	0.32	0.44	0.36	0.064
Willamette River	PCBs	PCB 118	WB	3	3	0.50	0.57	0.52	0.043
Willamette River	PCBs	PCB 123	FS	3	3	0.0044	0.0076	0.0061	0.0016
Willamette River	PCBs	PCB 123	WB	3	3	0.0069	0.012	0.0097	0.0025
Willamette River	PCBs	PCB 126	FS	3	0	0.0011	0.0017	0.00064	0.00016
Willamette River	PCBs	PCB 126	WB	3	3	0.0015	0.0030	0.0023	0.00075
Willamette River	PCBs	PCB 156	FS	3	3	0.030	0.045	0.037	0.0075
Willamette River	PCBs	PCB 156	WB	3	3	0.044	0.053	0.048	0.0049
Willamette River	PCBs	PCB 157	FS	3	3	0.0071	0.013	0.0095	0.0031
Willamette River	PCBs	PCB 157	WB	3	3	0.013	0.015	0.014	0.0012
Willamette River	PCBs	PCB 167	FS	3	3	0.019	0.023	0.020	0.0019
Willamette River	PCBs	PCB 167	WB	3	3	0.026	0.032	0.028	0.0032
Willamette River	PCBs	PCB 169	FS	3	0	0.00073	0.0010	0.00046	0.000081
Willamette River	PCBs	PCB 169	WB	3	0	0.0010	0.0016	0.00067	0.00015
Willamette River	PCBs	PCB 170	FS	3	3	0.063	0.095	0.080	0.016
Willamette River	PCBs	PCB 170	WB	3	3	0.093	0.11	0.100	0.0068
Willamette River	PCBs	PCB 180	FS	3	3	0.21	0.32	0.26	0.055
Willamette River	PCBs	PCB 180	WB	3	3	0.31	0.35	0.33	0.023
Willamette River	PCBs	PCB 189	FS	3	2	0.0011	0.0041	0.0028	0.0019
Willamette River	PCBs	PCB 189	WB	3	2	0.0010	0.0048	0.0030	0.0022
Willamette River	Pesticides	Aldrin	FS	3	0	1.8	2.0	0.95	0.050
Willamette River	Pesticides	Aldrin	WB	3	0	1.8	2.0	0.97	0.058
Willamette River	Pesticides	Alpha-BHC	FS	3	0	1.8	2.0	0.95	0.050
Willamette River	Pesticides	Alpha-BHC	WB	3	0	1.8	2.0	0.97	0.058
Willamette River	Pesticides	Alpha-Chlordene	FS	3	0	1.8	2.0	0.95	0.050
Willamette River	Pesticides	Alpha-Chlordene	WB	3	0	1.8	2.0	0.97	0.058
Willamette River	Pesticides	Beta-BHC	FS	3	0	1.8	2.0	0.95	0.050
Willamette River	Pesticides	Beta-BHC	WB	3	0	1.8	2.0	0.97	0.058
Willamette River	Pesticides	cis-Chlordane (alpha-Chloro)	FS	3	0	1.8	2.0	0.95	0.050
Willamette River	Pesticides	cis-Chlordane (alpha-Chloro)	WB	3	0	1.8	2.0	0.97	0.058
Willamette River	Pesticides	cis-Nonachlor	FS	3	0	1.8	2.0	0.95	0.050
Willamette River	Pesticides	cis-Nonachlor	WB	3	0	1.8	2.0	0.97	0.058
Willamette River	Pesticides	DDD-o,p'	FS	3	0	1.8	2.0	0.95	0.050
Willamette River	Pesticides	DDD-o,p'	WB	3	0	1.8	2.0	0.97	0.058
Willamette River	Pesticides	DDE-o,p'	FS	3	0	1.8	2.0	0.95	0.050
Willamette River	Pesticides	DDE-o,p'	WB	3	3	0.99	1.1	1.1	0.064
Willamette River	Pesticides	DDT-o,p'	FS	3	0	1.8	2.0	0.95	0.050
Willamette River	Pesticides	DDT-o,p'	WB	3	0	1.8	2.0	0.97	0.058
Willamette River	Pesticides	DDD-p,p'	FS	3	3	1.3	1.5	1.4	0.12
Willamette River	Pesticides	DDD-p,p'	WB	3	3	2.6	3.5	3.0	0.47

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Willamette River	Pesticides	DDE-p,p'	FS	3	3	6.6	9.1	7.7	1.3
Willamette River	Pesticides	DDE-p,p'	WB	3	3	11	12	12	0.58
Willamette River	Pesticides	DDT-p,p'	FS	3	3	1.5	2.5	1.8	0.58
Willamette River	Pesticides	DDT-p,p'	WB	3	3	3.7	4.9	4.2	0.61
Willamette River	Pesticides	DDMU	FS	3	0	1.8	2.0	0.95	0.050
Willamette River	Pesticides	DDMU	WB	3	0	1.8	2.0	0.97	0.058
Willamette River	Pesticides	Delta-BHC	FS	3	0	1.8	2.0	0.95	0.050
Willamette River	Pesticides	Delta-BHC	WB	3	0	1.8	2.0	0.97	0.058
Willamette River	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	0.00	na
Willamette River	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	0.00	na
Willamette River	Pesticides	Gamma-Chlordane	FS	3	0	1.8	2.0	0.95	0.050
Willamette River	Pesticides	Gamma-Chlordane	WB	3	0	1.8	2.0	0.97	0.058
Willamette River	Pesticides	gamma-Chlordene	FS	3	0	1.8	2.0	0.95	0.050
Willamette River	Pesticides	gamma-Chlordene	WB	3	0	1.8	2.0	0.97	0.058
Willamette River	Pesticides	Heptachlor	FS	3	0	1.8	2.0	0.95	0.050
Willamette River	Pesticides	Heptachlor	WB	3	0	1.8	2.0	0.97	0.058
Willamette River	Pesticides	Heptachlor Epoxide	FS	3	0	0.00	0.00	0.00	na
Willamette River	Pesticides	Heptachlor Epoxide	WB	3	0	0.00	0.00	0.00	na
Willamette River	Pesticides	Hexachlorobenzene	FS	3	2	1.6	2.6	1.7	0.85
Willamette River	Pesticides	Hexachlorobenzene	WB	3	3	3.1	3.6	3.3	0.25
Willamette River	Pesticides	Lindane	FS	3	0	1.8	2.0	0.95	0.050
Willamette River	Pesticides	Lindane	WB	3	0	1.8	2.0	0.97	0.058
Willamette River	Pesticides	Mirex	FS	3	0	1.8	2.0	0.95	0.050
Willamette River	Pesticides	Mirex	WB	3	0	1.8	2.0	0.97	0.058
Willamette River	Pesticides	Oxychlordane	FS	3	0	1.8	2.0	0.95	0.050
Willamette River	Pesticides	Oxychlordane	WB	3	0	1.8	2.0	0.97	0.058
Willamette River	Pesticides	Pentachloroanisol	FS	3	0	1.8	2.0	0.95	0.050
Willamette River	Pesticides	Pentachloroanisol	WB	3	3	0.72	1.1	0.90	0.19
Willamette River	Pesticides	Toxaphene	FS	3	0	53	59	28	1.5
Willamette River	Pesticides	Toxaphene	WB	3	0	54	60	29	1.6
Willamette River	Pesticides	trans-Nonachlor	FS	3	3	2.2	3.2	2.6	0.55
Willamette River	Pesticides	trans-Nonachlor	WB	3	3	3.8	4.3	4.1	0.29
Willamette River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	18	20	9.6	0.34
Willamette River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	17	19	9.2	0.49
Willamette River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	37	39	19	0.69
Willamette River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	35	39	18	0.98
Willamette River	Semivolatiles	2-Chloronaphthalene	FS	3	0	18	20	9.6	0.34
Willamette River	Semivolatiles	2-Chloronaphthalene	WB	3	0	17	19	9.2	0.49
Willamette River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	Acenaphthene	FS	3	0	18	20	9.6	0.34
Willamette River	Semivolatiles	Acenaphthene	WB	3	0	17	19	9.2	0.49
Willamette River	Semivolatiles	Acenaphthylene	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	Acenaphthylene	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	Anthracene	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	Anthracene	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	Benzo(a)anthracene	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	Benzo(a)pyrene	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	18	20	9.6	0.34
Willamette River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	17	19	9.2	0.49
Willamette River	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	18	20	9.6	0.34
Willamette River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	17	19	9.2	0.49
Willamette River	Semivolatiles	Chrysene	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	Chrysene	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	18	20	9.6	0.34
Willamette River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	17	19	9.2	0.49
Willamette River	Semivolatiles	Dibenzofuran	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	Dibenzofuran	WB	3	0	8.7	9.6	4.6	0.24

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Willamette River	Semivolatiles	Fluoranthene	FS	3	0	18	20	9.6	0.34
Willamette River	Semivolatiles	Fluoranthene	WB	3	0	17	19	9.2	0.49
Willamette River	Semivolatiles	9H-Fluorene	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	9H-Fluorene	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	Hexachlorobutadiene	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	Hexachloroethane	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	Hexachloroethane	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	18	20	9.6	0.34
Willamette River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	17	19	9.2	0.49
Willamette River	Semivolatiles	Naphthalene	FS	3	0	12	20	8.6	2.2
Willamette River	Semivolatiles	Naphthalene	WB	3	0	14	20	9.0	1.6
Willamette River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	Nitrobenzene	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	Nitrobenzene	WB	3	0	8.7	9.6	4.6	0.24
Willamette River	Semivolatiles	Phenanthrene	FS	3	0	9.2	9.9	4.8	0.18
Willamette River	Semivolatiles	Phenanthrene	WB	3	0	9.4	13	5.3	0.98
Willamette River	Semivolatiles	Pyrene	FS	3	0	18	20	9.6	0.34
Willamette River	Semivolatiles	Pyrene	WB	3	1	19	120	48	66
Willamette River	Semivolatiles	Retene	FS	3	0	18	20	9.6	0.34
Willamette River	Semivolatiles	Retene	WB	3	0	17	19	9.2	0.49
Wind River	Dioxin/furans	2,3,7,8-TCDD	FS	3	0	0.000010	0.000030	0.000010	0.000050
Wind River	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
Wind River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000010	0.000080	0.000033	0.000041
Wind River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.000010	0.000010	0.0000050	0.00
Wind River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	2	0.000020	0.000060	0.000030	0.000026
Wind River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	1	0.000010	0.000020	0.000010	0.0000087
Wind River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.000070	0.00012	0.000097	0.000025
Wind River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	1	0.000010	0.000060	0.000023	0.000032
Wind River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000020	0.000040	0.000023	0.000015
Wind River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000010	0.000040	0.000025	0.000018
Wind River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	1	0.000020	0.000070	0.000037	0.000031
Wind River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.000080	0.00012	0.00010	0.000020
Wind River	Dioxin/furans	OCDD	FS	3	3	0.00025	0.00041	0.00034	0.000083
Wind River	Dioxin/furans	OCDD	WB	3	3	0.00021	0.00030	0.00025	0.000045
Wind River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00057	0.00068	0.00061	0.000059
Wind River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00059	0.00073	0.00068	0.000076
Wind River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.00010	0.00014	0.00012	0.000021
Wind River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	2	0.000010	0.00013	0.000088	0.000072
Wind River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00015	0.00018	0.00017	0.000015
Wind River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00016	0.00018	0.00017	0.000010
Wind River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000010	0.000060	0.000013	0.000014
Wind River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	1	0.000010	0.000030	0.000013	0.000014
Wind River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	1	0.000010	0.000060	0.000022	0.000014
Wind River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	2	0.000010	0.000030	0.000022	0.000014
Wind River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000060	0.000013	0.000014
Wind River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
Wind River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	1	0.000010	0.000060	0.000025	0.000018
Wind River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	1	0.000010	0.000030	0.000013	0.000014
Wind River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	1	0.000020	0.000070	0.000025	0.0000087
Wind River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	1	0.000010	0.000030	0.000015	0.000013
Wind River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000070	0.000020	0.000015
Wind River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
Wind River	Dioxin/furans	OCDF	FS	3	0	0.000010	0.00017	0.000042	0.000040
Wind River	Dioxin/furans	OCDF	WB	3	1	0.000010	0.000030	0.000013	0.0000076
Wind River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	780	970	450	51
Wind River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	940	970	480	7.5
Wind River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	780	970	450	51
Wind River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	940	970	480	7.5
Wind River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	780	970	450	51
Wind River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	940	970	480	7.5
Wind River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	780	970	450	51
Wind River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	940	970	480	7.5
Wind River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	780	970	450	51
Wind River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	940	970	480	7.5
Wind River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	310	390	180	20
Wind River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	380	390	190	3.0
Wind River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	780	970	450	51
Wind River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	940	970	480	7.5
Wind River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	310	390	180	20
Wind River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	380	390	190	3.0
Wind River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	310	390	180	20
Wind River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	380	390	190	3.0

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Wind River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	310	390	180	20
Wind River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	380	390	190	3.0
Wind River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	310	390	180	20
Wind River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	380	390	190	3.0
Wind River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	780	970	450	51
Wind River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	940	970	480	7.5
Wind River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	310	390	180	20
Wind River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	380	390	190	3.0
Wind River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	310	390	180	20
Wind River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	380	390	190	3.0
Wind River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	310	390	180	20
Wind River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	380	390	190	3.0
Wind River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	310	390	180	20
Wind River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	380	390	190	3.0
Wind River	Guaiacols/Phenols	Phenol	FS	3	0	310	390	180	20
Wind River	Guaiacols/Phenols	Phenol	WB	3	0	380	390	190	3.0
Wind River	Metals	Aluminum	FS	3	1	1,000	1,200	720	390
Wind River	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
Wind River	Metals	Antimony	FS	3	0	50	50	25	0.00
Wind River	Metals	Antimony	WB	3	0	50	50	25	0.00
Wind River	Metals	Arsenic	FS	3	3	850	920	900	36
Wind River	Metals	Arsenic	WB	3	3	640	880	790	130
Wind River	Metals	Barium	FS	3	0	200	200	100	0.00
Wind River	Metals	Barium	WB	3	0	200	200	100	0.00
Wind River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Wind River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Wind River	Metals	Cadmium	FS	3	3	7.8	11	9.6	1.6
Wind River	Metals	Cadmium	WB	3	3	120	150	130	16
Wind River	Metals	Chromium	FS	3	2	100	490	330	240
Wind River	Metals	Chromium	WB	3	2	100	150	100	50
Wind River	Metals	Cobalt	FS	3	2	1.0	5.0	3.3	2.4
Wind River	Metals	Cobalt	WB	3	3	42	120	77	37
Wind River	Metals	Copper	FS	3	3	680	710	700	20
Wind River	Metals	Copper	WB	3	3	1,200	1,400	1,300	100
Wind River	Metals	Lead	FS	3	0	10	10	5.0	0.00
Wind River	Metals	Lead	WB	3	3	11	13	12	1.0
Wind River	Metals	Manganese	FS	3	3	80	92	87	6.1
Wind River	Metals	Manganese	WB	3	3	330	390	370	40
Wind River	Metals	Mercury	FS	3	1	83	150	81	56
Wind River	Metals	Mercury	WB	3	0	97	110	52	3.5
Wind River	Metals	Nickel	FS	3	1	30	47	26	18
Wind River	Metals	Nickel	WB	3	3	34	45	39	5.6
Wind River	Metals	Selenium	FS	3	3	340	350	350	5.8
Wind River	Metals	Selenium	WB	3	3	510	580	550	41
Wind River	Metals	Silver	FS	3	0	100	100	50	0.00
Wind River	Metals	Silver	WB	3	0	100	100	50	0.00
Wind River	Metals	Thallium	FS	3	0	50	50	25	0.00
Wind River	Metals	Thallium	WB	3	0	50	50	25	0.00
Wind River	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
Wind River	Metals	Vanadium	WB	3	2	10	18	13	7.2
Wind River	Metals	Zinc	FS	3	3	5,900	6,700	6,200	480
Wind River	Metals	Zinc	WB	3	3	20,000	24,000	22,000	2,300
Wind River	PCBs	Aroclor 1016	FS	3	0	17	19	9.2	0.58
Wind River	PCBs	Aroclor 1016	WB	3	0	19	19	9.5	0.00
Wind River	PCBs	Aroclor 1221	FS	3	0	17	19	9.2	0.58
Wind River	PCBs	Aroclor 1221	WB	3	0	19	19	9.5	0.00
Wind River	PCBs	Aroclor 1232	FS	3	0	17	19	9.2	0.58
Wind River	PCBs	Aroclor 1232	WB	3	0	19	19	9.5	0.00
Wind River	PCBs	Aroclor 1242	FS	3	0	17	19	9.2	0.58
Wind River	PCBs	Aroclor 1242	WB	3	0	19	19	9.5	0.00
Wind River	PCBs	Aroclor 1248	FS	3	0	17	19	9.2	0.58
Wind River	PCBs	Aroclor 1248	WB	3	0	19	19	9.5	0.00
Wind River	PCBs	Aroclor 1254	FS	3	3	14	15	14	0.58
Wind River	PCBs	Aroclor 1254	WB	3	3	16	21	19	2.9
Wind River	PCBs	Aroclor 1260	FS	3	0	17	19	9.2	0.58
Wind River	PCBs	Aroclor 1260	WB	3	0	19	19	9.5	0.00
Wind River	PCBs	PCB 077	FS	3	3	0.010	0.011	0.011	0.00025
Wind River	PCBs	PCB 077	WB	3	3	0.013	0.014	0.013	0.00062
Wind River	PCBs	PCB 105	FS	3	3	0.19	0.22	0.20	0.015
Wind River	PCBs	PCB 105	WB	3	3	0.21	0.23	0.22	0.0076
Wind River	PCBs	PCB 114	FS	3	3	0.016	0.020	0.017	0.0023
Wind River	PCBs	PCB 114	WB	3	3	0.020	0.021	0.021	0.00071
Wind River	PCBs	PCB 118	FS	3	3	0.44	0.51	0.47	0.034
Wind River	PCBs	PCB 118	WB	3	3	0.49	0.53	0.51	0.018
Wind River	PCBs	PCB 123	FS	3	3	0.0061	0.012	0.0083	0.0030
Wind River	PCBs	PCB 123	WB	3	3	0.011	0.013	0.012	0.00087

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Wind River	PCBs	PCB 126	FS	3	3	0.0027	0.0030	0.0028	0.00016
Wind River	PCBs	PCB 126	WB	3	2	0.00064	0.0042	0.0028	0.0021
Wind River	PCBs	PCB 156	FS	3	3	0.036	0.043	0.039	0.0039
Wind River	PCBs	PCB 156	WB	3	3	0.039	0.040	0.039	0.0010
Wind River	PCBs	PCB 157	FS	3	3	0.0098	0.011	0.010	0.00087
Wind River	PCBs	PCB 157	WB	3	3	0.0097	0.010	0.0099	0.00035
Wind River	PCBs	PCB 167	FS	3	3	0.026	0.028	0.027	0.0013
Wind River	PCBs	PCB 167	WB	3	3	0.026	0.027	0.027	0.00057
Wind River	PCBs	PCB 169	FS	3	0	0.0010	0.0012	0.00053	0.000046
Wind River	PCBs	PCB 169	WB	3	0	0.0010	0.0010	0.00050	0.00
Wind River	PCBs	PCB 170	FS	3	3	0.064	0.078	0.069	0.0074
Wind River	PCBs	PCB 170	WB	3	3	0.063	0.065	0.064	0.0011
Wind River	PCBs	PCB 180	FS	3	3	0.22	0.26	0.24	0.022
Wind River	PCBs	PCB 180	WB	3	3	0.21	0.22	0.21	0.0031
Wind River	PCBs	PCB 189	FS	3	3	0.0023	0.0028	0.0025	0.00025
Wind River	PCBs	PCB 189	WB	3	3	0.0023	0.0027	0.0025	0.00019
Wind River	Pesticides	Aldrin	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	Aldrin	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	Alpha-BHC	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	Alpha-BHC	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	Alpha-Chlordane	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	Alpha-Chlordane	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	Beta-BHC	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	Beta-BHC	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	cis-Chlordane (alpha-Chloro	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	cis-Chlordane (alpha-Chloro	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	cis-Nonachlor	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	cis-Nonachlor	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	DDD-o,p'	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	DDD-o,p'	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	DDE-o,p'	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	DDE-o,p'	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	DDT-o,p'	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	DDT-o,p'	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	DDD-p,p'	FS	3	3	1.5	2.5	2.0	0.50
Wind River	Pesticides	DDD-p,p'	WB	3	3	2.8	4.1	3.6	0.72
Wind River	Pesticides	DDE-p,p'	FS	3	3	11	13	12	1.0
Wind River	Pesticides	DDE-p,p'	WB	3	3	11	14	12	1.5
Wind River	Pesticides	DDT-p,p'	FS	3	3	1.7	5.8	4.1	2.1
Wind River	Pesticides	DDT-p,p'	WB	3	3	5.6	7.0	6.2	0.71
Wind River	Pesticides	DDMU	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	DDMU	WB	3	1	1.9	2.8	1.6	1.1
Wind River	Pesticides	Delta-BHC	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	Delta-BHC	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	Endosulfan Sulfate	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	Endosulfan Sulfate	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	Gamma-Chlordane	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	Gamma-Chlordane	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	gamma-Chlordane	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	gamma-Chlordane	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	Heptachlor	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	Heptachlor	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	Heptachlor Epoxide	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	Hexachlorobenzene	FS	3	1	1.7	2.3	1.4	0.81
Wind River	Pesticides	Hexachlorobenzene	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	Lindane	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	Lindane	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	Mirex	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	Mirex	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	Oxychlordane	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	Oxychlordane	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	Pentachloroanisol	FS	3	0	1.7	1.9	0.92	0.058
Wind River	Pesticides	Pentachloroanisol	WB	3	0	1.9	1.9	0.95	1.5E-08
Wind River	Pesticides	Toxaphene	FS	3	0	51	58	28	2.0
Wind River	Pesticides	Toxaphene	WB	3	0	56	58	29	0.58
Wind River	Pesticides	trans-Nonachlor	FS	3	3	2.4	2.9	2.6	0.26
Wind River	Pesticides	trans-Nonachlor	WB	3	3	3.1	4.9	3.9	0.92
Wind River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	7.8	9.7	4.5	0.49
Wind River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	7.8	9.7	4.5	0.49
Wind River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	16	19	8.9	1.0
Wind River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	19	19	9.6	0.15
Wind River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	31	39	18	2.0
Wind River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	38	39	19	0.30

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Wind River	Semivolatiles	2-Chloronaphthalene	FS	3	0	16	19	8.9	1.0
Wind River	Semivolatiles	2-Chloronaphthalene	WB	3	0	19	19	9.6	0.15
Wind River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	7.8	9.7	4.5	0.49
Wind River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	7.8	9.7	4.5	0.49
Wind River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	Acenaphthene	FS	3	0	16	19	8.9	1.0
Wind River	Semivolatiles	Acenaphthene	WB	3	0	19	19	9.6	0.15
Wind River	Semivolatiles	Acenaphthylene	FS	3	0	7.8	9.7	4.5	0.49
Wind River	Semivolatiles	Acenaphthylene	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	Anthracene	FS	3	0	7.8	9.7	4.5	0.49
Wind River	Semivolatiles	Anthracene	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	7.8	9.7	4.5	0.49
Wind River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	7.8	9.7	4.5	0.49
Wind River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	7.8	9.7	4.5	0.49
Wind River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	Benzo(a)anthracene	FS	3	0	7.8	9.7	4.5	0.49
Wind River	Semivolatiles	Benzo(a)anthracene	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.7	10	4.9	0.076
Wind River	Semivolatiles	Benzo(a)pyrene	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	19	20	9.8	0.18
Wind River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	19	19	9.6	0.16
Wind River	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	9.7	10	4.9	0.076
Wind River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.7	10	4.9	0.076
Wind River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	16	19	8.9	1.0
Wind River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	19	19	9.6	0.15
Wind River	Semivolatiles	Chrysene	FS	3	0	7.8	9.7	4.5	0.49
Wind River	Semivolatiles	Chrysene	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	19	20	9.8	0.18
Wind River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	19	19	9.6	0.16
Wind River	Semivolatiles	Dibenzofuran	FS	3	0	7.8	9.7	4.5	0.49
Wind River	Semivolatiles	Dibenzofuran	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	Fluoranthene	FS	3	0	16	19	8.9	1.0
Wind River	Semivolatiles	Fluoranthene	WB	3	0	19	19	9.6	0.15
Wind River	Semivolatiles	9H-Fluorene	FS	3	0	7.8	9.7	4.5	0.49
Wind River	Semivolatiles	9H-Fluorene	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	Hexachlorobutadiene	FS	3	0	7.8	9.7	4.5	0.49
Wind River	Semivolatiles	Hexachlorobutadiene	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	Hexachloroethane	FS	3	0	7.8	9.7	4.5	0.49
Wind River	Semivolatiles	Hexachloroethane	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	19	20	9.8	0.18
Wind River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	19	19	9.6	0.16
Wind River	Semivolatiles	Naphthalene	FS	3	0	26	67	26	11
Wind River	Semivolatiles	Naphthalene	WB	3	0	43	66	28	6.2
Wind River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	7.8	9.7	4.5	0.49
Wind River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	1	7.8	11	6.5	3.9
Wind River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	2	9.6	10	8.3	3.0
Wind River	Semivolatiles	Nitrobenzene	FS	3	0	7.8	9.7	4.5	0.49
Wind River	Semivolatiles	Nitrobenzene	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	Phenanthrene	FS	3	0	7.8	9.7	4.5	0.49
Wind River	Semivolatiles	Phenanthrene	WB	3	0	9.4	9.7	4.8	0.076
Wind River	Semivolatiles	Pyrene	FS	3	0	16	19	8.9	1.0
Wind River	Semivolatiles	Pyrene	WB	3	0	19	19	9.6	0.15
Wind River	Semivolatiles	Retene	FS	3	0	16	19	8.9	1.0
Wind River	Semivolatiles	Retene	WB	3	0	19	19	9.6	0.15
Yakima River	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000020	0.000040	0.000022	0.000016
Yakima River	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000020	0.00010	0.000025	0.000022
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000020	0.000090	0.000038	0.000045
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.000090	0.00038	0.00022	0.00015
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000030	0.000030	0.000015	0.00
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	2	0.000030	0.00019	0.00011	0.000089
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.000060	0.000060	0.000060	0.00
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	3	0.000070	0.00025	0.00013	0.00010
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000030	0.000040	0.000023	0.000014
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000030	0.000050	0.000035	0.000018
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000040	0.00010	0.000067	0.000042
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.000090	0.00043	0.00023	0.00018
Yakima River	Dioxin/furans	OCDD	FS	3	2	0.00010	0.00022	0.00014	0.000085
Yakima River	Dioxin/furans	OCDD	WB	3	3	0.00016	0.00095	0.00046	0.00043
Yakima River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00064	0.00072	0.00068	0.000040
Yakima River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00057	0.0010	0.00077	0.00024

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.00010	0.00012	0.00011	0.000010
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	2	0.000020	0.00036	0.00016	0.00018
Yakima River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00013	0.00017	0.00015	0.000020
Yakima River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00016	0.00026	0.00019	0.000058
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	1	0.000020	0.000030	0.000017	0.000012
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	1	0.000010	0.00015	0.000055	0.000082
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000020	0.000020	0.000020	0.00
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	1	0.000010	0.00013	0.000048	0.000071
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
Yakima River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	1	0.000020	0.000030	0.000017	0.000012
Yakima River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.000030	0.00034	0.00017	0.00016
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000040	0.000050	0.000022	0.0000029
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000040	0.00020	0.000097	0.000093
Yakima River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000040	0.000050	0.000022	0.0000029
Yakima River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000020	0.000040	0.000015	0.0000050
Yakima River	Dioxin/furans	OCDF	FS	3	0	0.000050	0.000090	0.000032	0.000012
Yakima River	Dioxin/furans	OCDF	WB	3	1	0.000040	0.00013	0.000058	0.000062
Yakima River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	490	500	250	1.4
Yakima River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	490	2,500	890	560
Yakima River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	490	500	250	1.4
Yakima River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	490	2,500	890	560
Yakima River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	490	500	250	1.4
Yakima River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	490	2,500	890	560
Yakima River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	490	500	250	1.4
Yakima River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	490	2,500	890	560
Yakima River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	490	500	250	1.4
Yakima River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	490	2,500	890	560
Yakima River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	200	200	99	0.58
Yakima River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	190	990	360	230
Yakima River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	490	500	250	1.4
Yakima River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	490	2,500	890	560
Yakima River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	200	200	99	0.58
Yakima River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	190	990	360	230
Yakima River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	200	200	99	0.58
Yakima River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	190	990	360	230
Yakima River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	200	200	99	0.58
Yakima River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	190	990	360	230
Yakima River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	200	200	99	0.58
Yakima River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	190	990	360	230
Yakima River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	490	500	250	1.4
Yakima River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	490	2,500	890	560
Yakima River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	200	200	99	0.58
Yakima River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	190	990	360	230
Yakima River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	200	200	99	0.58
Yakima River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	190	990	360	230
Yakima River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	200	200	99	0.58
Yakima River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	190	990	360	230
Yakima River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	200	200	99	0.58
Yakima River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	190	990	360	230
Yakima River	Guaiacols/Phenols	Phenol	FS	3	0	200	200	99	0.58
Yakima River	Guaiacols/Phenols	Phenol	WB	3	0	190	990	360	230
Yakima River	Metals	Aluminum	FS	3	1	1,000	1,100	700	350
Yakima River	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
Yakima River	Metals	Antimony	FS	3	0	50	50	25	0.00
Yakima River	Metals	Antimony	WB	3	0	50	50	25	0.00
Yakima River	Metals	Arsenic	FS	3	3	760	850	820	51
Yakima River	Metals	Arsenic	WB	3	3	860	940	890	43
Yakima River	Metals	Barium	FS	3	0	200	200	100	0.00
Yakima River	Metals	Barium	WB	3	0	200	200	100	0.00
Yakima River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Yakima River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Yakima River	Metals	Cadmium	FS	3	3	8.4	10	9.0	0.87
Yakima River	Metals	Cadmium	WB	3	3	110	140	130	15
Yakima River	Metals	Chromium	FS	3	0	100	100	50	0.00
Yakima River	Metals	Chromium	WB	3	2	100	120	90	36
Yakima River	Metals	Cobalt	FS	3	3	3.8	4.4	4.2	0.35
Yakima River	Metals	Cobalt	WB	3	3	77	90	84	6.5
Yakima River	Metals	Copper	FS	3	3	720	820	760	53
Yakima River	Metals	Copper	WB	3	3	1,200	1,300	1,300	49
Yakima River	Metals	Lead	FS	3	0	10	10	5.0	0.00
Yakima River	Metals	Lead	WB	3	3	10	12	11	1.2
Yakima River	Metals	Manganese	FS	3	3	86	110	97	11
Yakima River	Metals	Manganese	WB	3	3	340	450	400	54
Yakima River	Metals	Mercury	FS	3	0	98	100	50	1.0
Yakima River	Metals	Mercury	WB	3	0	96	100	50	1.5

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Metals	Nickel	FS	3	1	30	31	20	9.2
Yakima River	Metals	Nickel	WB	3	0	30	30	15	0.00
Yakima River	Metals	Selenium	FS	3	3	380	390	380	5.8
Yakima River	Metals	Selenium	WB	3	3	460	680	570	110
Yakima River	Metals	Silver	FS	3	0	100	100	50	0.00
Yakima River	Metals	Silver	WB	3	0	100	100	50	0.00
Yakima River	Metals	Thallium	FS	3	0	50	50	25	0.00
Yakima River	Metals	Thallium	WB	3	0	50	50	25	0.00
Yakima River	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
Yakima River	Metals	Vanadium	WB	3	3	10	18	13	4.4
Yakima River	Metals	Zinc	FS	3	3	6,600	7,100	6,900	230
Yakima River	Metals	Zinc	WB	3	3	23,000	30,000	25,000	3,800
Yakima River	PCBs	Aroclor 1016	FS	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1016	WB	3	0	19	20	9.7	0.29
Yakima River	PCBs	Aroclor 1221	FS	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1221	WB	3	0	19	20	9.7	0.29
Yakima River	PCBs	Aroclor 1232	FS	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1232	WB	3	0	19	20	9.7	0.29
Yakima River	PCBs	Aroclor 1242	FS	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1242	WB	3	0	19	20	9.7	0.29
Yakima River	PCBs	Aroclor 1248	FS	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1248	WB	3	0	19	20	9.7	0.29
Yakima River	PCBs	Aroclor 1254	FS	3	3	15	18	17	1.7
Yakima River	PCBs	Aroclor 1254	WB	3	3	16	19	18	1.5
Yakima River	PCBs	Aroclor 1260	FS	3	0	19	19	9.5	0.00
Yakima River	PCBs	Aroclor 1260	WB	3	0	19	20	9.7	0.29
Yakima River	PCBs	PCB 077	FS	3	3	0.011	0.012	0.012	0.00032
Yakima River	PCBs	PCB 077	WB	3	3	0.0090	0.014	0.012	0.0026
Yakima River	PCBs	PCB 105	FS	3	3	0.23	0.24	0.23	0.0025
Yakima River	PCBs	PCB 105	WB	3	3	0.24	0.25	0.24	0.0040
Yakima River	PCBs	PCB 114	FS	3	3	0.020	0.022	0.021	0.0010
Yakima River	PCBs	PCB 114	WB	3	3	0.022	0.023	0.022	0.00053
Yakima River	PCBs	PCB 118	FS	3	3	0.53	0.55	0.54	0.011
Yakima River	PCBs	PCB 118	WB	3	3	0.55	0.56	0.55	0.0042
Yakima River	PCBs	PCB 123	FS	3	3	0.011	0.013	0.012	0.00087
Yakima River	PCBs	PCB 123	WB	3	3	0.0080	0.012	0.0095	0.0019
Yakima River	PCBs	PCB 126	FS	3	3	0.0027	0.0034	0.0030	0.00037
Yakima River	PCBs	PCB 126	WB	3	1	0.0014	0.0031	0.0015	0.0013
Yakima River	PCBs	PCB 156	FS	3	3	0.039	0.042	0.040	0.0016
Yakima River	PCBs	PCB 156	WB	3	3	0.040	0.045	0.042	0.0024
Yakima River	PCBs	PCB 157	FS	3	3	0.010	0.011	0.011	0.00064
Yakima River	PCBs	PCB 157	WB	3	3	0.011	0.013	0.012	0.0010
Yakima River	PCBs	PCB 167	FS	3	3	0.029	0.030	0.030	0.00072
Yakima River	PCBs	PCB 167	WB	3	3	0.028	0.029	0.029	0.00087
Yakima River	PCBs	PCB 169	FS	3	0	0.0010	0.0013	0.00058	0.000073
Yakima River	PCBs	PCB 169	WB	3	0	0.0010	0.0013	0.00055	0.000078
Yakima River	PCBs	PCB 170	FS	3	3	0.077	0.090	0.086	0.0075
Yakima River	PCBs	PCB 170	WB	3	3	0.084	0.094	0.088	0.0047
Yakima River	PCBs	PCB 180	FS	3	3	0.26	0.27	0.27	0.0040
Yakima River	PCBs	PCB 180	WB	3	3	0.24	0.26	0.25	0.012
Yakima River	PCBs	PCB 189	FS	3	3	0.0027	0.0028	0.0027	0.000062
Yakima River	PCBs	PCB 189	WB	3	2	0.0025	0.0028	0.0022	0.00087
Yakima River	Pesticides	Aldrin	FS	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Aldrin	WB	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Alpha-BHC	FS	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Alpha-BHC	WB	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Alpha-Chlordene	FS	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Alpha-Chlordene	WB	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Beta-BHC	FS	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Beta-BHC	WB	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	cis-Chlordane (alpha-Chloro	FS	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	cis-Chlordane (alpha-Chloro	WB	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	cis-Nonachlor	FS	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	cis-Nonachlor	WB	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	DDD-o,p'	FS	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	DDD-o,p'	WB	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	DDE-o,p'	FS	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	DDE-o,p'	WB	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	DDT-o,p'	FS	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	DDT-o,p'	WB	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	DDD-p,p'	FS	3	3	2.2	2.9	2.6	0.35
Yakima River	Pesticides	DDD-p,p'	WB	3	3	3.0	4.2	3.5	0.64
Yakima River	Pesticides	DDE-p,p'	FS	3	3	16	17	16	0.58
Yakima River	Pesticides	DDE-p,p'	WB	3	3	15	20	18	2.5
Yakima River	Pesticides	DDT-p,p'	FS	3	3	6.3	7.1	6.6	0.46
Yakima River	Pesticides	DDT-p,p'	WB	3	3	6.6	8.0	7.1	0.78

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Pesticides	DDMU	FS	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	DDMU	WB	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Delta-BHC	FS	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Delta-BHC	WB	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	0.00	na
Yakima River	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	0.00	na
Yakima River	Pesticides	Gamma-Chlordane	FS	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Gamma-Chlordane	WB	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	gamma-Chlordene	FS	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	gamma-Chlordene	WB	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Heptachlor	FS	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Heptachlor	WB	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Heptachlor Epoxide	FS	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Hexachlorobenzene	FS	3	3	2.4	3.2	2.8	0.40
Yakima River	Pesticides	Hexachlorobenzene	WB	3	3	2.8	3.8	3.4	0.51
Yakima River	Pesticides	Lindane	FS	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Lindane	WB	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Mirex	FS	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Mirex	WB	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Oxychlordane	FS	3	0	1.9	1.9	0.95	1.5E-08
Yakima River	Pesticides	Oxychlordane	WB	3	0	1.9	2.0	0.97	0.029
Yakima River	Pesticides	Pentachloroanisol	FS	3	1	0.78	1.9	0.89	0.098
Yakima River	Pesticides	Pentachloroanisol	WB	3	1	1.1	2.0	1.0	0.076
Yakima River	Pesticides	Toxaphene	FS	3	0	56	58	29	0.50
Yakima River	Pesticides	Toxaphene	WB	3	0	57	59	29	0.58
Yakima River	Pesticides	trans-Nonachlor	FS	3	3	3.2	3.4	3.3	0.10
Yakima River	Pesticides	trans-Nonachlor	WB	3	3	3.7	4.2	3.9	0.25
Yakima River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	4.9	5.0	2.5	0.029
Yakima River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	4.8	25	8.9	5.6
Yakima River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	4.9	5.0	2.5	0.029
Yakima River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	4.8	25	8.9	5.6
Yakima River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	9.9	10	5.0	0.029
Yakima River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	9.7	50	18	11
Yakima River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	20	20	9.9	0.058
Yakima River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	19	99	36	23
Yakima River	Semivolatiles	2-Chloronaphthalene	FS	3	0	9.9	10	5.0	0.029
Yakima River	Semivolatiles	2-Chloronaphthalene	WB	3	0	9.7	50	18	11
Yakima River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	4.9	5.0	2.5	0.029
Yakima River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	4.8	25	8.9	5.6
Yakima River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	4.9	5.0	2.5	0.029
Yakima River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	4.8	25	8.9	5.6
Yakima River	Semivolatiles	Acenaphthene	FS	3	0	9.9	10	5.0	0.029
Yakima River	Semivolatiles	Acenaphthene	WB	3	0	9.7	50	18	11
Yakima River	Semivolatiles	Acenaphthylene	FS	3	0	4.9	5.0	2.5	0.029
Yakima River	Semivolatiles	Acenaphthylene	WB	3	0	4.8	25	8.9	5.6
Yakima River	Semivolatiles	Anthracene	FS	3	0	4.9	5.0	2.5	0.029
Yakima River	Semivolatiles	Anthracene	WB	3	0	4.8	25	8.9	5.6
Yakima River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	4.9	5.0	2.5	0.029
Yakima River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	4.8	25	8.9	5.6
Yakima River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	4.9	5.0	2.5	0.029
Yakima River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	4.8	25	8.9	5.6
Yakima River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	4.9	5.0	2.5	0.029
Yakima River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	4.8	25	8.9	5.6
Yakima River	Semivolatiles	Benzo(a)anthracene	FS	3	0	4.9	25	9.1	5.7
Yakima River	Semivolatiles	Benzo(a)anthracene	WB	3	0	4.8	25	8.9	5.6
Yakima River	Semivolatiles	Benzo(a)pyrene	FS	3	0	4.9	25	9.1	5.7
Yakima River	Semivolatiles	Benzo(a)pyrene	WB	3	0	4.8	25	8.9	5.6
Yakima River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	9.9	50	18	11
Yakima River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	9.7	50	18	11
Yakima River	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	4.9	25	9.1	5.7
Yakima River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	4.8	25	8.9	5.6
Yakima River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	4.9	25	9.1	5.7
Yakima River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	4.8	25	8.9	5.6
Yakima River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	9.9	10	5.0	0.029
Yakima River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	9.7	50	18	11
Yakima River	Semivolatiles	Chrysene	FS	3	0	4.9	25	9.1	5.7
Yakima River	Semivolatiles	Chrysene	WB	3	0	4.8	25	8.9	5.6
Yakima River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	9.9	50	18	11
Yakima River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	9.7	50	18	11
Yakima River	Semivolatiles	Dibenzofuran	FS	3	0	4.9	5.0	2.5	0.029
Yakima River	Semivolatiles	Dibenzofuran	WB	3	0	4.8	25	8.9	5.6
Yakima River	Semivolatiles	Fluoranthene	FS	3	0	9.9	10	5.0	0.029
Yakima River	Semivolatiles	Fluoranthene	WB	3	0	9.7	50	18	11
Yakima River	Semivolatiles	9H-Fluorene	FS	3	0	4.9	5.0	2.5	0.029
Yakima River	Semivolatiles	9H-Fluorene	WB	3	0	4.8	25	8.9	5.6

Appendix D-2: Tributary Summary Statistics
Spring Chinook Salmon

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Semivolatiles	Hexachlorobutadiene	FS	3	0	4.9	5.0	2.5	0.029
Yakima River	Semivolatiles	Hexachlorobutadiene	WB	3	0	4.8	25	8.9	5.6
Yakima River	Semivolatiles	Hexachloroethane	FS	3	0	4.9	5.0	2.5	0.029
Yakima River	Semivolatiles	Hexachloroethane	WB	3	0	4.8	25	8.9	5.6
Yakima River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	9.9	50	18	11
Yakima River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	9.7	50	18	11
Yakima River	Semivolatiles	Naphthalene	FS	3	0	27	43	17	4.0
Yakima River	Semivolatiles	Naphthalene	WB	3	0	25	67	24	11
Yakima River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	4.9	5.0	2.5	0.029
Yakima River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	4.8	25	8.9	5.6
Yakima River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	4.9	6.0	2.7	0.28
Yakima River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	4.8	27	9.2	5.9
Yakima River	Semivolatiles	Nitrobenzene	FS	3	0	4.9	5.0	2.5	0.029
Yakima River	Semivolatiles	Nitrobenzene	WB	3	0	4.8	25	8.9	5.6
Yakima River	Semivolatiles	Phenanthrene	FS	3	0	4.9	7.4	3.0	0.64
Yakima River	Semivolatiles	Phenanthrene	WB	3	0	5.8	25	9.1	5.4
Yakima River	Semivolatiles	Pyrene	FS	3	0	9.9	50	18	11
Yakima River	Semivolatiles	Pyrene	WB	3	0	9.7	50	18	11
Yakima River	Semivolatiles	Retene	FS	3	0	9.9	50	18	11
Yakima River	Semivolatiles	Retene	WB	3	0	9.7	50	18	11

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Clearwater River	Dioxin/furans	2,3,7,8-TCDD	FS	3	2	0.000040	0.000080	0.000050	0.000017
Clearwater River	Dioxin/furans	2,3,7,8-TCDD	WB	3	1	0.000020	0.000060	0.000027	0.000029
Clearwater River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000040	0.00016	0.000068	0.000070
Clearwater River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.00022	0.00026	0.00024	0.000020
Clearwater River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	1	0.000070	0.00012	0.000067	0.000046
Clearwater River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	2	0.000020	0.00014	0.000093	0.000072
Clearwater River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	1	0.000070	0.00011	0.000062	0.000038
Clearwater River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000020	0.00015	0.000090	0.000072
Clearwater River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000050	0.000090	0.000039	0.000052
Clearwater River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	1	0.000020	0.000060	0.000027	0.000029
Clearwater River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000050	0.00024	0.00015	0.00011
Clearwater River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	2	0.000020	0.00029	0.00016	0.00014
Clearwater River	Dioxin/furans	OCDD	FS	3	3	0.00039	0.0010	0.00070	0.00032
Clearwater River	Dioxin/furans	OCDD	WB	3	3	0.00025	0.00073	0.00055	0.00026
Clearwater River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00039	0.00065	0.00049	0.00014
Clearwater River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00048	0.00057	0.00052	0.000045
Clearwater River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.00012	0.00021	0.00016	0.000044
Clearwater River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.00012	0.00018	0.00016	0.000032
Clearwater River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00029	0.00047	0.00035	0.00010
Clearwater River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00029	0.00037	0.00034	0.000042
Clearwater River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	1	0.000055	0.00013	0.000047	0.000016
Clearwater River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	3	0.000030	0.000060	0.000047	0.000015
Clearwater River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	1	0.000070	0.00013	0.000060	0.000023
Clearwater River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	3	0.000060	0.000090	0.000073	0.000015
Clearwater River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	1	0.000065	0.00013	0.000050	0.000015
Clearwater River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	2	0.000020	0.000080	0.000053	0.000038
Clearwater River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	2	0.000070	0.00023	0.00015	0.00010
Clearwater River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00019	0.00022	0.00020	0.000015
Clearwater River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000065	0.00010	0.000066	0.000021
Clearwater River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	1	0.000020	0.00012	0.000047	0.000064
Clearwater River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000045	0.00010	0.000034	0.000014
Clearwater River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	1	0.000020	0.000060	0.000027	0.000029
Clearwater River	Dioxin/furans	OCDF	FS	3	1	0.000060	0.00011	0.000046	0.000014
Clearwater River	Dioxin/furans	OCDF	WB	3	3	0.000040	0.00014	0.00010	0.000053
Clearwater River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	470	970	320	140
Clearwater River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	990	1,000	500	2.0
Clearwater River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	470	970	320	140
Clearwater River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	990	1,000	500	2.0
Clearwater River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	470	970	320	140
Clearwater River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	990	1,000	500	2.0
Clearwater River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	470	970	320	140
Clearwater River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	990	1,000	500	2.0
Clearwater River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	470	970	320	140
Clearwater River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	990	1,000	500	2.0
Clearwater River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	190	390	130	55
Clearwater River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	400	400	200	0.87
Clearwater River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	470	970	320	140
Clearwater River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	990	1,000	500	2.0
Clearwater River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	190	390	130	55
Clearwater River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	400	400	200	0.87
Clearwater River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	190	390	130	55
Clearwater River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	400	400	200	0.87
Clearwater River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	190	390	130	55
Clearwater River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	400	400	200	0.87
Clearwater River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	190	390	130	55
Clearwater River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	400	400	200	0.87
Clearwater River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	470	970	320	140
Clearwater River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	990	1,000	500	2.0
Clearwater River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	190	390	130	55
Clearwater River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	400	400	200	0.87
Clearwater River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	190	390	130	55
Clearwater River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	400	400	200	0.87
Clearwater River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	190	390	130	55
Clearwater River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	400	400	200	0.87
Clearwater River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	190	390	130	55
Clearwater River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	400	400	200	0.87
Clearwater River	Guaiacols/Phenols	Phenol	FS	3	0	190	390	130	55
Clearwater River	Guaiacols/Phenols	Phenol	WB	3	0	400	400	200	0.87
Clearwater River	Metals	Aluminum	FS	3	1	3,000	8,500	4,200	3,800
Clearwater River	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
Clearwater River	Metals	Antimony	FS	3	0	50	50	25	0.00
Clearwater River	Metals	Antimony	WB	3	0	50	50	25	0.00
Clearwater River	Metals	Arsenic	FS	3	3	380	530	460	76
Clearwater River	Metals	Arsenic	WB	3	3	500	520	510	12
Clearwater River	Metals	Barium	FS	3	2	200	640	380	270
Clearwater River	Metals	Barium	WB	3	3	320	550	470	130

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Clearwater River Metals		Beryllium	FS	3	1	4.0	5.1	2.7	1.2
Clearwater River Metals		Beryllium	WB	3	1	6.0	6.4	4.1	2.0
Clearwater River Metals		Cadmium	FS	3	2	4.0	5.8	3.8	1.9
Clearwater River Metals		Cadmium	WB	3	3	38	54	48	8.5
Clearwater River Metals		Chromium	FS	3	0	100	100	50	0.00
Clearwater River Metals		Chromium	WB	3	3	150	340	210	110
Clearwater River Metals		Cobalt	FS	3	3	6.0	7.3	6.5	0.72
Clearwater River Metals		Cobalt	WB	3	3	130	280	190	81
Clearwater River Metals		Copper	FS	3	3	740	870	810	65
Clearwater River Metals		Copper	WB	3	3	3,000	3,200	3,100	79
Clearwater River Metals		Lead	FS	3	0	10	10	5.0	0.00
Clearwater River Metals		Lead	WB	3	3	31	140	75	60
Clearwater River Metals		Manganese	FS	3	3	110	310	180	110
Clearwater River Metals		Manganese	WB	3	3	360	630	480	140
Clearwater River Metals		Mercury	FS	3	3	120	140	130	13
Clearwater River Metals		Mercury	WB	3	3	90	420	200	190
Clearwater River Metals		Nickel	FS	3	3	34	60	50	14
Clearwater River Metals		Nickel	WB	3	2	30	86	57	37
Clearwater River Metals		Selenium	FS	3	3	320	380	350	28
Clearwater River Metals		Selenium	WB	3	3	590	660	620	40
Clearwater River Metals		Silver	FS	3	0	100	150	58	14
Clearwater River Metals		Silver	WB	3	0	200	200	100	0.00
Clearwater River Metals		Thallium	FS	3	0	50	50	25	0.00
Clearwater River Metals		Thallium	WB	3	0	50	50	25	0.00
Clearwater River Metals		Vanadium	FS	3	2	20	44	26	17
Clearwater River Metals		Vanadium	WB	3	3	91	190	130	52
Clearwater River Metals		Zinc	FS	3	3	6,900	7,800	7,400	470
Clearwater River Metals		Zinc	WB	3	3	20,000	31,000	25,000	5,200
Clearwater River PCBs		Aroclor 1016	FS	3	0	19	21	10	0.50
Clearwater River PCBs		Aroclor 1016	WB	3	0	19	21	10	0.50
Clearwater River PCBs		Aroclor 1221	FS	3	0	19	21	10	0.50
Clearwater River PCBs		Aroclor 1221	WB	3	0	19	21	10	0.50
Clearwater River PCBs		Aroclor 1232	FS	3	0	19	21	10	0.50
Clearwater River PCBs		Aroclor 1232	WB	3	0	19	21	10	0.50
Clearwater River PCBs		Aroclor 1242	FS	3	0	19	21	10	0.50
Clearwater River PCBs		Aroclor 1242	WB	3	0	19	21	10	0.50
Clearwater River PCBs		Aroclor 1248	FS	3	0	19	21	10	0.50
Clearwater River PCBs		Aroclor 1248	WB	3	0	19	21	10	0.50
Clearwater River PCBs		Aroclor 1254	FS	3	3	17	21	19	1.8
Clearwater River PCBs		Aroclor 1254	WB	3	3	20	27	22	4.0
Clearwater River PCBs		Aroclor 1260	FS	3	0	19	21	10	0.50
Clearwater River PCBs		Aroclor 1260	WB	3	0	19	21	10	0.50
Clearwater River PCBs		PCB 077	FS	3	3	0.014	0.019	0.017	0.0025
Clearwater River PCBs		PCB 077	WB	3	3	0.016	0.020	0.017	0.0022
Clearwater River PCBs		PCB 105	FS	3	3	0.30	0.34	0.32	0.018
Clearwater River PCBs		PCB 105	WB	3	3	0.29	0.33	0.32	0.026
Clearwater River PCBs		PCB 114	FS	3	3	0.029	0.032	0.031	0.0013
Clearwater River PCBs		PCB 114	WB	3	3	0.025	0.031	0.029	0.0033
Clearwater River PCBs		PCB 118	FS	3	3	0.75	0.84	0.79	0.047
Clearwater River PCBs		PCB 118	WB	3	3	0.69	0.80	0.76	0.060
Clearwater River PCBs		PCB 123	FS	3	3	0.0075	0.013	0.010	0.0026
Clearwater River PCBs		PCB 123	WB	3	3	0.0065	0.012	0.010	0.0033
Clearwater River PCBs		PCB 126	FS	3	3	0.0052	0.0065	0.0059	0.00095
Clearwater River PCBs		PCB 126	WB	3	3	0.0059	0.0066	0.0061	0.00042
Clearwater River PCBs		PCB 156	FS	3	3	0.069	0.086	0.077	0.0087
Clearwater River PCBs		PCB 156	WB	3	3	0.067	0.081	0.076	0.0077
Clearwater River PCBs		PCB 157	FS	3	3	0.017	0.023	0.020	0.0030
Clearwater River PCBs		PCB 157	WB	3	3	0.019	0.022	0.021	0.0016
Clearwater River PCBs		PCB 167	FS	3	3	0.044	0.050	0.046	0.0032
Clearwater River PCBs		PCB 167	WB	3	3	0.042	0.049	0.047	0.0036
Clearwater River PCBs		PCB 169	FS	3	1	0.00062	0.0012	0.00055	0.00022
Clearwater River PCBs		PCB 169	WB	3	0	0.0010	0.0011	0.00051	0.000020
Clearwater River PCBs		PCB 170	FS	3	3	0.13	0.17	0.15	0.020
Clearwater River PCBs		PCB 170	WB	3	3	0.14	0.16	0.15	0.0085
Clearwater River PCBs		PCB 180	FS	3	3	0.38	0.45	0.41	0.035
Clearwater River PCBs		PCB 180	WB	3	3	0.37	0.42	0.40	0.026
Clearwater River PCBs		PCB 189	FS	3	3	0.0052	0.0086	0.0065	0.0018
Clearwater River PCBs		PCB 189	WB	3	3	0.0056	0.0065	0.0061	0.00047
Clearwater River Pesticides		Aldrin	FS	3	0	1.9	2.1	1.0	0.050
Clearwater River Pesticides		Aldrin	WB	3	0	1.9	2.1	1.0	0.050
Clearwater River Pesticides		Alpha-BHC	FS	3	0	1.9	2.1	1.0	0.050
Clearwater River Pesticides		Alpha-BHC	WB	3	0	1.9	2.1	1.0	0.050
Clearwater River Pesticides		Alpha-Chlordene	FS	3	0	1.9	2.1	1.0	0.050
Clearwater River Pesticides		Alpha-Chlordene	WB	3	0	1.9	2.1	1.0	0.050
Clearwater River Pesticides		Beta-BHC	FS	3	0	1.9	2.1	1.0	0.050
Clearwater River Pesticides		Beta-BHC	WB	3	0	1.9	2.1	1.0	0.050

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Clearwater River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	1	1.9	2.1	1.3	0.51
Clearwater River	Pesticides	cis-Nonachlor	FS	3	3	2.0	2.3	2.2	0.15
Clearwater River	Pesticides	cis-Nonachlor	WB	3	3	1.8	2.5	2.2	0.38
Clearwater River	Pesticides	DDD-o,p'	FS	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	DDD-o,p'	WB	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	DDE-o,p'	FS	3	3	1.3	1.9	1.5	0.35
Clearwater River	Pesticides	DDE-o,p'	WB	3	3	1.4	1.9	1.6	0.25
Clearwater River	Pesticides	DDT-o,p'	FS	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	DDT-o,p'	WB	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	DDD-p,p'	FS	3	3	3.3	5.5	4.5	1.1
Clearwater River	Pesticides	DDD-p,p'	WB	3	3	4.7	6.6	5.8	0.97
Clearwater River	Pesticides	DDE-p,p'	FS	3	3	12	16	14	2.2
Clearwater River	Pesticides	DDE-p,p'	WB	3	3	17	17	17	0.00
Clearwater River	Pesticides	DDT-p,p'	FS	3	3	3.8	4.7	4.2	0.46
Clearwater River	Pesticides	DDT-p,p'	WB	3	3	4.2	5.0	4.6	0.40
Clearwater River	Pesticides	DDMU	FS	3	3	1.4	1.8	1.4	0.11
Clearwater River	Pesticides	DDMU	WB	3	2	1.6	1.9	1.4	0.41
Clearwater River	Pesticides	Delta-BHC	FS	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	Delta-BHC	WB	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	Endosulfan Sulfate	FS	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	Endosulfan Sulfate	WB	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	Gamma-Chlordane	WB	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	gamma-Chlordene	FS	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	gamma-Chlordene	WB	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	Heptachlor	FS	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	Heptachlor	WB	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	Heptachlor Epoxide	FS	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	Hexachlorobenzene	FS	3	3	2.1	2.8	2.4	0.38
Clearwater River	Pesticides	Hexachlorobenzene	WB	3	3	2.8	2.9	2.9	0.058
Clearwater River	Pesticides	Lindane	FS	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	Lindane	WB	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	Mirex	FS	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	Mirex	WB	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	Oxychlordane	FS	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	Oxychlordane	WB	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	Pentachloroanisol	FS	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	Pentachloroanisol	WB	3	0	1.9	2.1	1.0	0.050
Clearwater River	Pesticides	Toxaphene	FS	3	0	57	63	30	1.4
Clearwater River	Pesticides	Toxaphene	WB	3	0	58	62	30	1.0
Clearwater River	Pesticides	trans-Nonachlor	FS	3	3	2.5	3.1	2.8	0.31
Clearwater River	Pesticides	trans-Nonachlor	WB	3	3	3.1	3.3	3.2	0.10
Clearwater River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	9.3	48	11	11
Clearwater River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	47	49	24	0.30
Clearwater River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	19	97	23	22
Clearwater River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	95	97	48	0.60
Clearwater River	Semivolatiles	2-Chloronaphthalene	FS	3	0	9.3	48	11	11
Clearwater River	Semivolatiles	2-Chloronaphthalene	WB	3	0	47	49	24	0.30
Clearwater River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	Acenaphthene	FS	3	0	9.3	48	11	11
Clearwater River	Semivolatiles	Acenaphthene	WB	3	0	47	49	24	0.30
Clearwater River	Semivolatiles	Acenaphthylene	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	Acenaphthylene	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	Anthracene	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	Anthracene	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	Benzo(a)anthracene	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	Benzo(a)anthracene	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	Benzo(a)pyrene	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	Benzo(a)pyrene	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	9.3	48	11	11
Clearwater River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	47	49	24	0.30

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Clearwater River	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	9.3	48	11	11
Clearwater River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	47	49	24	0.30
Clearwater River	Semivolatiles	Chrysene	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	Chrysene	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	9.3	48	11	11
Clearwater River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	47	49	24	0.30
Clearwater River	Semivolatiles	Dibenzofuran	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	Dibenzofuran	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	Fluoranthene	FS	3	0	9.3	48	11	11
Clearwater River	Semivolatiles	Fluoranthene	WB	3	0	47	49	24	0.30
Clearwater River	Semivolatiles	9H-Fluorene	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	9H-Fluorene	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	Hexachlorobutadiene	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	Hexachlorobutadiene	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	Hexachloroethane	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	Hexachloroethane	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	9.3	48	11	11
Clearwater River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	47	49	24	0.30
Clearwater River	Semivolatiles	Naphthalene	FS	3	0	22	35	14	3.4
Clearwater River	Semivolatiles	Naphthalene	WB	3	0	36	36	18	0.18
Clearwater River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	6.0	24	6.3	5.0
Clearwater River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	Nitrobenzene	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	Nitrobenzene	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	Phenanthrene	FS	3	0	4.6	24	5.7	5.6
Clearwater River	Semivolatiles	Phenanthrene	WB	3	0	24	24	12	0.15
Clearwater River	Semivolatiles	Pyrene	FS	3	0	9.3	48	11	11
Clearwater River	Semivolatiles	Pyrene	WB	3	0	47	49	24	0.30
Clearwater River	Semivolatiles	Retene	FS	3	0	9.3	48	11	11
Clearwater River	Semivolatiles	Retene	WB	3	0	47	49	24	0.30
Columbia River	Dioxin/furans	2,3,7,8-TCDD	E	1	0	0.000030	0.000030	0.000015	na
Columbia River	Dioxin/furans	2,3,7,8-TCDD	FS	6	0	0.000010	0.000050	0.000013	0.000082
Columbia River	Dioxin/furans	2,3,7,8-TCDD	WB	6	2	0.000010	0.000060	0.000021	0.000021
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDD	E	1	0	0.000030	0.000030	0.000015	na
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	6	4	0.000010	0.00011	0.000068	0.000047
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	6	2	0.000010	0.00019	0.000062	0.000073
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDD	E	1	0	0.000020	0.000020	0.000010	na
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	6	1	0.000010	0.000030	0.000012	0.000052
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	6	1	0.000010	0.000030	0.000011	0.000097
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDD	E	1	0	0.000020	0.000020	0.000010	na
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	6	1	0.000010	0.000050	0.000017	0.000017
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	6	3	0.000010	0.000070	0.000031	0.000028
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDD	E	1	0	0.000020	0.000020	0.000010	na
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	6	1	0.000010	0.000040	0.000014	0.000013
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	6	3	0.000010	0.000040	0.000023	0.000016
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	E	1	1	0.000070	0.000070	0.000070	na
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	6	3	0.000010	0.00014	0.000062	0.000058
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	6	2	0.000030	0.00020	0.000064	0.000071
Columbia River	Dioxin/furans	OCDD	E	1	1	0.00038	0.00038	0.00038	na
Columbia River	Dioxin/furans	OCDD	FS	6	5	0.000020	0.00078	0.00029	0.00027
Columbia River	Dioxin/furans	OCDD	WB	6	4	0.000050	0.0022	0.00073	0.00092
Columbia River	Dioxin/furans	2,3,7,8-TCDF	E	1	1	0.00022	0.00022	0.00022	na
Columbia River	Dioxin/furans	2,3,7,8-TCDF	FS	6	6	0.00027	0.00045	0.00034	0.000065
Columbia River	Dioxin/furans	2,3,7,8-TCDF	WB	6	6	0.00025	0.00060	0.00039	0.00013
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDF	E	1	0	0.000020	0.000020	0.000010	na
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	6	1	0.000010	0.00010	0.000027	0.000036
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	6	3	0.000010	0.00019	0.000072	0.000080
Columbia River	Dioxin/furans	2,3,4,7,8-PeCDF	E	1	0	0.000020	0.000020	0.000010	na
Columbia River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	6	3	0.000010	0.00029	0.00014	0.00014
Columbia River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	6	3	0.000010	0.00037	0.00013	0.00015
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	6	1	0.000010	0.000030	0.000013	0.000088
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	6	2	0.000020	0.000040	0.000022	0.000015
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	6	1	0.000010	0.000030	0.000013	0.000088
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	6	2	0.000020	0.000070	0.000028	0.000024
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	6	1	0.000010	0.000030	0.000010	0.000032
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	6	0	0.000020	0.000040	0.000013	0.000042
Columbia River	Dioxin/furans	2,3,4,6,7,8-HxCDF	E	1	0	0.000020	0.000020	0.000010	na

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	6	2	0.000010	0.000050	0.000020	0.000017
Columbia River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	6	2	0.000020	0.000080	0.000028	0.000027
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	E	1	0	0.000020	0.000020	0.000010	na
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	6	1	0.000010	0.000050	0.000018	0.000016
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	6	0	0.000020	0.000070	0.000021	0.000011
Columbia River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	E	1	0	0.000020	0.000020	0.000010	na
Columbia River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	6	0	0.000010	0.000030	0.000012	0.0000041
Columbia River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	6	0	0.000020	0.000070	0.000021	0.000011
Columbia River	Dioxin/furans	OCDF	E	1	0	0.000030	0.000030	0.000015	na
Columbia River	Dioxin/furans	OCDF	FS	6	1	0.000030	0.000080	0.000031	0.000017
Columbia River	Dioxin/furans	OCDF	WB	6	1	0.000050	0.00043	0.00012	0.00016
Columbia River	Guaiacols/Phenols	4-Chloroguaiacol	E	1	0	920	920	460	na
Columbia River	Guaiacols/Phenols	4-Chloroguaiacol	FS	6	0	930	990	480	13
Columbia River	Guaiacols/Phenols	4-Chloroguaiacol	WB	6	0	920	990	480	13
Columbia River	Guaiacols/Phenols	3,4-Dichloroguaiacol	E	1	0	920	920	460	na
Columbia River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	6	0	930	990	480	13
Columbia River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	6	0	920	990	480	13
Columbia River	Guaiacols/Phenols	4,5-Dichloroguaiacol	E	1	0	920	920	460	na
Columbia River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	6	0	930	990	480	13
Columbia River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	6	0	920	990	480	13
Columbia River	Guaiacols/Phenols	4,6-Dichloroguaiacol	E	1	0	920	920	460	na
Columbia River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	6	0	930	990	480	13
Columbia River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	6	0	920	990	480	13
Columbia River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	E	1	0	920	920	460	na
Columbia River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	6	0	930	990	480	13
Columbia River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	6	0	920	990	480	13
Columbia River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	E	1	0	370	370	180	na
Columbia River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	6	0	370	400	190	5.1
Columbia River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	6	0	370	400	190	5.1
Columbia River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	E	1	0	920	920	460	na
Columbia River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	6	0	930	990	480	13
Columbia River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	6	0	920	990	480	13
Columbia River	Guaiacols/Phenols	Tetrachloroguaiacol	E	1	0	370	370	180	na
Columbia River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	6	0	370	400	190	5.1
Columbia River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	6	0	370	400	190	5.1
Columbia River	Guaiacols/Phenols	2-Chlorophenol	E	1	0	370	370	180	na
Columbia River	Guaiacols/Phenols	2-Chlorophenol	FS	6	0	370	400	190	5.1
Columbia River	Guaiacols/Phenols	2-Chlorophenol	WB	6	0	370	400	190	5.1
Columbia River	Guaiacols/Phenols	4-Chloro-3-methylphenol	E	1	0	370	370	180	na
Columbia River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	6	0	370	400	190	5.1
Columbia River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	6	0	370	400	190	5.1
Columbia River	Guaiacols/Phenols	2,4-Dichlorophenol	E	1	0	370	370	180	na
Columbia River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	6	0	370	400	190	5.1
Columbia River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	6	0	370	400	190	5.1
Columbia River	Guaiacols/Phenols	2,4-Dimethylphenol	E	1	0	920	920	460	na
Columbia River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	6	0	930	990	480	13
Columbia River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	6	0	920	990	480	13
Columbia River	Guaiacols/Phenols	2,4,5-Trichlorophenol	E	1	0	370	370	180	na
Columbia River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	6	0	370	400	190	5.1
Columbia River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	6	0	370	400	190	5.1
Columbia River	Guaiacols/Phenols	2,4,6-Trichlorophenol	E	1	0	370	370	180	na
Columbia River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	6	0	370	400	190	5.1
Columbia River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	6	0	370	400	190	5.1
Columbia River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	E	1	0	370	370	180	na
Columbia River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	6	0	370	400	190	5.1
Columbia River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	6	0	370	400	190	5.1
Columbia River	Guaiacols/Phenols	Pentachlorophenol	E	1	0	370	370	180	na
Columbia River	Guaiacols/Phenols	Pentachlorophenol	FS	6	0	370	400	190	5.1
Columbia River	Guaiacols/Phenols	Pentachlorophenol	WB	6	0	370	400	190	5.1
Columbia River	Guaiacols/Phenols	Phenol	E	1	0	370	370	180	na
Columbia River	Guaiacols/Phenols	Phenol	FS	6	0	370	400	190	5.1
Columbia River	Guaiacols/Phenols	Phenol	WB	6	0	370	400	190	5.1
Columbia River	Metals	Aluminum	E	1	1	4,500	4,500	4,500	na
Columbia River	Metals	Aluminum	FS	6	4	1,000	1,600	1,100	460
Columbia River	Metals	Aluminum	WB	6	2	680	1,000	570	120
Columbia River	Metals	Antimony	E	1	0	50	50	25	na
Columbia River	Metals	Antimony	FS	6	0	50	50	25	0.00
Columbia River	Metals	Antimony	WB	6	0	50	50	25	0.00
Columbia River	Metals	Arsenic	E	1	0	50	50	25	na
Columbia River	Metals	Arsenic	FS	6	6	470	690	600	75
Columbia River	Metals	Arsenic	WB	6	6	480	720	610	78
Columbia River	Metals	Barium	E	1	0	200	200	100	na
Columbia River	Metals	Barium	FS	6	1	200	320	140	90
Columbia River	Metals	Barium	WB	6	0	200	200	100	0.00
Columbia River	Metals	Beryllium	E	1	0	4.0	4.0	2.0	na
Columbia River	Metals	Beryllium	FS	6	0	4.0	4.0	2.0	0.00

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Metals	Beryllium	WB	6	0	4.0	4.0	2.0	0.00
Columbia River	Metals	Cadmium	E	1	1	34	34	34	na
Columbia River	Metals	Cadmium	FS	6	6	4.7	8.7	6.7	1.7
Columbia River	Metals	Cadmium	WB	6	6	29	57	50	11
Columbia River	Metals	Chromium	E	1	1	220	220	220	na
Columbia River	Metals	Chromium	FS	6	1	100	200	75	61
Columbia River	Metals	Chromium	WB	6	3	100	120	82	35
Columbia River	Metals	Cobalt	E	1	1	170	170	170	na
Columbia River	Metals	Cobalt	FS	6	6	6.8	150	56	59
Columbia River	Metals	Cobalt	WB	6	6	58	150	110	34
Columbia River	Metals	Copper	E	1	1	18,000	18,000	18,000	na
Columbia River	Metals	Copper	FS	6	6	540	740	660	82
Columbia River	Metals	Copper	WB	6	6	2,000	3,200	2,700	400
Columbia River	Metals	Lead	E	1	1	41	41	41	na
Columbia River	Metals	Lead	FS	6	3	10	23	11	7.6
Columbia River	Metals	Lead	WB	6	3	10	28	13	9.7
Columbia River	Metals	Manganese	E	1	1	2,200	2,200	2,200	na
Columbia River	Metals	Manganese	FS	6	6	100	200	140	37
Columbia River	Metals	Manganese	WB	6	6	250	430	360	67
Columbia River	Metals	Mercury	E	1	0	43	43	22	na
Columbia River	Metals	Mercury	FS	6	6	70	140	110	25
Columbia River	Metals	Mercury	WB	6	5	50	110	83	30
Columbia River	Metals	Nickel	E	1	1	520	520	520	na
Columbia River	Metals	Nickel	FS	6	5	30	70	44	19
Columbia River	Metals	Nickel	WB	6	5	30	160	86	61
Columbia River	Metals	Selenium	E	1	1	4,500	4,500	4,500	na
Columbia River	Metals	Selenium	FS	6	5	330	500	340	50
Columbia River	Metals	Selenium	WB	6	6	480	790	680	110
Columbia River	Metals	Silver	E	1	0	100	100	50	na
Columbia River	Metals	Silver	FS	6	0	100	100	50	0.00
Columbia River	Metals	Silver	WB	6	0	100	100	50	0.00
Columbia River	Metals	Thallium	E	1	0	50	50	25	na
Columbia River	Metals	Thallium	FS	6	0	50	50	25	0.00
Columbia River	Metals	Thallium	WB	6	0	50	50	25	0.00
Columbia River	Metals	Vanadium	E	1	1	110	110	110	na
Columbia River	Metals	Vanadium	FS	6	4	11	24	14	5.8
Columbia River	Metals	Vanadium	WB	6	6	27	150	71	46
Columbia River	Metals	Zinc	E	1	1	76,000	76,000	76,000	na
Columbia River	Metals	Zinc	FS	6	6	7,100	9,300	8,100	770
Columbia River	Metals	Zinc	WB	6	6	18,000	23,000	20,000	2,000
Columbia River	PCBs	Aroclor 1016	E	1	0	20	20	10	na
Columbia River	PCBs	Aroclor 1016	FS	6	0	19	20	9.9	0.20
Columbia River	PCBs	Aroclor 1016	WB	6	0	19	20	9.7	0.26
Columbia River	PCBs	Aroclor 1221	E	1	0	20	20	10	na
Columbia River	PCBs	Aroclor 1221	FS	6	0	19	20	9.9	0.20
Columbia River	PCBs	Aroclor 1221	WB	6	0	19	20	9.7	0.26
Columbia River	PCBs	Aroclor 1232	E	1	0	20	20	10	na
Columbia River	PCBs	Aroclor 1232	FS	6	0	19	20	9.9	0.20
Columbia River	PCBs	Aroclor 1232	WB	6	0	19	20	9.7	0.26
Columbia River	PCBs	Aroclor 1242	E	1	0	20	20	10	na
Columbia River	PCBs	Aroclor 1242	FS	6	0	19	20	9.9	0.20
Columbia River	PCBs	Aroclor 1242	WB	6	0	19	20	9.7	0.26
Columbia River	PCBs	Aroclor 1248	E	1	0	20	20	10	na
Columbia River	PCBs	Aroclor 1248	FS	6	0	19	20	9.9	0.20
Columbia River	PCBs	Aroclor 1248	WB	6	0	19	20	9.7	0.26
Columbia River	PCBs	Aroclor 1254	E	1	1	15	15	15	na
Columbia River	PCBs	Aroclor 1254	FS	6	6	12	19	15	2.6
Columbia River	PCBs	Aroclor 1254	WB	6	6	15	22	18	2.7
Columbia River	PCBs	Aroclor 1260	E	1	0	20	20	10	na
Columbia River	PCBs	Aroclor 1260	FS	6	0	19	20	9.9	0.20
Columbia River	PCBs	Aroclor 1260	WB	6	0	19	20	9.7	0.26
Columbia River	PCBs	PCB 077	E	1	1	0.0080	0.0080	0.0080	na
Columbia River	PCBs	PCB 077	FS	6	6	0.0090	0.016	0.012	0.0026
Columbia River	PCBs	PCB 077	WB	6	6	0.0096	0.019	0.015	0.0040
Columbia River	PCBs	PCB 105	E	1	1	0.15	0.15	0.15	na
Columbia River	PCBs	PCB 105	FS	6	6	0.17	0.25	0.21	0.036
Columbia River	PCBs	PCB 105	WB	6	6	0.17	0.33	0.25	0.057
Columbia River	PCBs	PCB 114	E	1	1	0.015	0.015	0.015	na
Columbia River	PCBs	PCB 114	FS	6	6	0.017	0.026	0.021	0.0037
Columbia River	PCBs	PCB 114	WB	6	6	0.018	0.032	0.026	0.0051
Columbia River	PCBs	PCB 118	E	1	1	0.35	0.35	0.35	na
Columbia River	PCBs	PCB 118	FS	6	6	0.41	0.62	0.51	0.087
Columbia River	PCBs	PCB 118	WB	6	6	0.41	0.79	0.61	0.13
Columbia River	PCBs	PCB 123	E	1	1	0.0058	0.0058	0.0058	na
Columbia River	PCBs	PCB 123	FS	6	6	0.0065	0.012	0.0089	0.0025
Columbia River	PCBs	PCB 123	WB	6	6	0.0071	0.016	0.012	0.0036

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	PCBs	PCB 126	E	1	1	0.0021	0.0021	0.0021	na
Columbia River	PCBs	PCB 126	FS	6	4	0.00050	0.0056	0.0033	0.0024
Columbia River	PCBs	PCB 126	WB	6	6	0.0025	0.0090	0.0053	0.0022
Columbia River	PCBs	PCB 156	E	1	1	0.028	0.028	0.028	na
Columbia River	PCBs	PCB 156	FS	6	6	0.034	0.058	0.046	0.0094
Columbia River	PCBs	PCB 156	WB	6	6	0.033	0.077	0.055	0.014
Columbia River	PCBs	PCB 157	E	1	1	0.0077	0.0077	0.0077	na
Columbia River	PCBs	PCB 157	FS	6	6	0.011	0.017	0.013	0.0026
Columbia River	PCBs	PCB 157	WB	6	6	0.010	0.020	0.016	0.0033
Columbia River	PCBs	PCB 167	E	1	1	0.018	0.018	0.018	na
Columbia River	PCBs	PCB 167	FS	6	6	0.024	0.038	0.031	0.0060
Columbia River	PCBs	PCB 167	WB	6	6	0.022	0.048	0.036	0.0088
Columbia River	PCBs	PCB 169	E	1	0	0.0010	0.0010	0.00050	na
Columbia River	PCBs	PCB 169	FS	6	0	0.0010	0.0010	0.00050	0.00
Columbia River	PCBs	PCB 169	WB	6	0	0.0010	0.0014	0.00057	0.00010
Columbia River	PCBs	PCB 170	E	1	1	0.055	0.055	0.055	na
Columbia River	PCBs	PCB 170	FS	6	6	0.067	0.11	0.091	0.019
Columbia River	PCBs	PCB 170	WB	6	6	0.077	0.14	0.11	0.022
Columbia River	PCBs	PCB 180	E	1	1	0.16	0.16	0.16	na
Columbia River	PCBs	PCB 180	FS	6	6	0.22	0.35	0.28	0.055
Columbia River	PCBs	PCB 180	WB	6	6	0.24	0.41	0.33	0.060
Columbia River	PCBs	PCB 189	E	1	0	0.0010	0.0010	0.00050	na
Columbia River	PCBs	PCB 189	FS	6	6	0.0026	0.0055	0.0041	0.0013
Columbia River	PCBs	PCB 189	WB	6	6	0.0026	0.0082	0.0047	0.0021
Columbia River	Pesticides	Aldrin	E	1	0	2.0	2.0	1.0	na
Columbia River	Pesticides	Aldrin	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Aldrin	WB	6	0	1.9	2.0	0.97	0.026
Columbia River	Pesticides	Alpha-BHC	E	1	0	2.0	2.0	1.0	na
Columbia River	Pesticides	Alpha-BHC	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Alpha-BHC	WB	6	0	1.9	2.0	0.97	0.026
Columbia River	Pesticides	Alpha-Chlordene	E	1	0	2.0	2.0	1.0	na
Columbia River	Pesticides	Alpha-Chlordene	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Alpha-Chlordene	WB	6	0	1.9	2.0	0.97	0.026
Columbia River	Pesticides	Beta-BHC	E	1	0	2.0	2.0	1.0	na
Columbia River	Pesticides	Beta-BHC	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Beta-BHC	WB	6	0	1.9	2.0	0.97	0.026
Columbia River	Pesticides	cis-Chlordane (alpha-Chlordane)	E	1	1	1.3	1.3	1.3	na
Columbia River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	6	2	1.2	2.0	1.2	0.32
Columbia River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	6	1	1.9	2.1	1.2	0.46
Columbia River	Pesticides	cis-Nonachlor	E	1	0	2.0	2.0	1.0	na
Columbia River	Pesticides	cis-Nonachlor	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	cis-Nonachlor	WB	6	0	1.9	2.0	0.97	0.026
Columbia River	Pesticides	DDD-o,p'	E	1	0	2.0	2.0	1.0	na
Columbia River	Pesticides	DDD-o,p'	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	DDD-o,p'	WB	6	0	1.9	2.0	0.97	0.026
Columbia River	Pesticides	DDE-o,p'	E	1	0	2.0	2.0	1.0	na
Columbia River	Pesticides	DDE-o,p'	FS	6	3	0.78	2.0	0.99	0.13
Columbia River	Pesticides	DDE-o,p'	WB	6	2	1.2	2.0	1.1	0.15
Columbia River	Pesticides	DDT-o,p'	E	1	0	2.0	2.0	1.0	na
Columbia River	Pesticides	DDT-o,p'	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	DDT-o,p'	WB	6	0	1.9	2.0	0.97	0.026
Columbia River	Pesticides	DDD-p,p'	E	1	1	3.3	3.3	3.3	na
Columbia River	Pesticides	DDD-p,p'	FS	6	6	1.7	9.0	4.4	2.9
Columbia River	Pesticides	DDD-p,p'	WB	6	6	2.4	11	5.6	3.2
Columbia River	Pesticides	DDE-p,p'	E	1	1	6.5	6.5	6.5	na
Columbia River	Pesticides	DDE-p,p'	FS	6	6	5.1	9.9	6.8	1.7
Columbia River	Pesticides	DDE-p,p'	WB	6	6	5.3	11	8.0	2.5
Columbia River	Pesticides	DDT-p,p'	E	1	0	2.0	2.0	1.0	na
Columbia River	Pesticides	DDT-p,p'	FS	6	4	1.2	2.3	1.6	0.61
Columbia River	Pesticides	DDT-p,p'	WB	6	2	1.9	2.4	1.4	0.63
Columbia River	Pesticides	DDMU	E	1	0	2.0	2.0	1.0	na
Columbia River	Pesticides	DDMU	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	DDMU	WB	6	0	1.9	2.0	0.97	0.026
Columbia River	Pesticides	Delta-BHC	E	1	0	2.0	2.0	1.0	na
Columbia River	Pesticides	Delta-BHC	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Delta-BHC	WB	6	0	1.9	2.0	0.97	0.026
Columbia River	Pesticides	Endosulfan Sulfate	E	1	0	2.0	2.0	1.0	na
Columbia River	Pesticides	Endosulfan Sulfate	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Endosulfan Sulfate	WB	6	0	1.9	2.0	0.97	0.026
Columbia River	Pesticides	Gamma-Chlordane	E	1	0	2.0	2.0	1.0	na
Columbia River	Pesticides	Gamma-Chlordane	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Gamma-Chlordane	WB	6	0	1.9	2.0	0.97	0.026
Columbia River	Pesticides	gamma-Chlordene	E	1	0	2.0	2.0	1.0	na
Columbia River	Pesticides	gamma-Chlordene	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	gamma-Chlordene	WB	6	0	1.9	2.0	0.97	0.026
Columbia River	Pesticides	Heptachlor	E	1	0	2.0	2.0	1.0	na

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Pesticides	Heptachlor	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Heptachlor	WB	6	0	1.9	2.0	0.97	0.026
Columbia River	Pesticides	Heptachlor Epoxide	E	1	0	2.0	2.0	1.0	na
Columbia River	Pesticides	Heptachlor Epoxide	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Heptachlor Epoxide	WB	6	0	1.9	2.0	0.97	0.026
Columbia River	Pesticides	Hexachlorobenzene	E	1	1	1.9	1.9	1.9	na
Columbia River	Pesticides	Hexachlorobenzene	FS	6	4	1.3	2.0	1.4	0.34
Columbia River	Pesticides	Hexachlorobenzene	WB	6	6	1.4	2.4	1.9	0.34
Columbia River	Pesticides	Lindane	E	1	0	2.0	2.0	1.0	na
Columbia River	Pesticides	Lindane	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Lindane	WB	6	0	1.9	2.0	0.97	0.026
Columbia River	Pesticides	Mirex	E	1	0	2.0	2.0	1.0	na
Columbia River	Pesticides	Mirex	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Mirex	WB	6	0	1.9	2.0	0.97	0.026
Columbia River	Pesticides	Oxychlorane	E	1	0	2.0	2.0	1.0	na
Columbia River	Pesticides	Oxychlorane	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Oxychlorane	WB	6	0	1.9	2.0	0.97	0.026
Columbia River	Pesticides	Pentachloroanisol	E	1	0	2.0	2.0	1.0	na
Columbia River	Pesticides	Pentachloroanisol	FS	6	0	1.9	2.0	0.99	0.020
Columbia River	Pesticides	Pentachloroanisol	WB	6	0	1.9	2.0	0.97	0.026
Columbia River	Pesticides	Toxaphene	E	1	0	60	60	30	na
Columbia River	Pesticides	Toxaphene	FS	6	0	58	60	30	0.32
Columbia River	Pesticides	Toxaphene	WB	6	0	56	59	29	0.58
Columbia River	Pesticides	trans-Nonachlor	E	1	1	1.0	1.0	1.0	na
Columbia River	Pesticides	trans-Nonachlor	FS	6	2	1.4	2.2	1.3	0.49
Columbia River	Pesticides	trans-Nonachlor	WB	6	5	1.4	2.8	1.9	0.68
Columbia River	Semivolatiles	1,2,4-Trichlorobenzene	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	1,2,4-Trichlorobenzene	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	1,2,4-Trichlorobenzene	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	1,2-Diphenylhydrazine	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	1,2-Diphenylhydrazine	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	1,2-Diphenylhydrazine	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	2,4-Dinitrotoluene	E	1	0	18	18	9.2	na
Columbia River	Semivolatiles	2,4-Dinitrotoluene	FS	6	0	18	20	9.5	0.27
Columbia River	Semivolatiles	2,4-Dinitrotoluene	WB	6	0	18	20	9.5	0.26
Columbia River	Semivolatiles	2,6-Dinitrotoluene	E	1	0	37	37	18	na
Columbia River	Semivolatiles	2,6-Dinitrotoluene	FS	6	0	37	40	19	0.54
Columbia River	Semivolatiles	2,6-Dinitrotoluene	WB	6	0	37	40	19	0.52
Columbia River	Semivolatiles	2-Chloronaphthalene	E	1	0	18	18	9.2	na
Columbia River	Semivolatiles	2-Chloronaphthalene	FS	6	0	18	20	9.5	0.27
Columbia River	Semivolatiles	2-Chloronaphthalene	WB	6	0	18	20	9.5	0.26
Columbia River	Semivolatiles	4-Bromophenyl-Phenylether	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	4-Bromophenyl-Phenylether	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	4-Bromophenyl-Phenylether	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	4-Chlorophenyl-Phenylether	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Acenaphthene	E	1	0	18	18	9.2	na
Columbia River	Semivolatiles	Acenaphthene	FS	6	0	18	20	9.5	0.27
Columbia River	Semivolatiles	Acenaphthene	WB	6	0	18	20	9.5	0.26
Columbia River	Semivolatiles	Acenaphthylene	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	Acenaphthylene	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Acenaphthylene	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Anthracene	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	Anthracene	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Anthracene	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Benzene, 1,2-dichloro-	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	Benzene, 1,2-dichloro-	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Benzene, 1,2-dichloro-	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Benzene, 1,3-dichloro-	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	Benzene, 1,3-dichloro-	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Benzene, 1,3-dichloro-	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Benzene, 1,4-dichloro-	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	Benzene, 1,4-dichloro-	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Benzene, 1,4-dichloro-	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Benzo(a)anthracene	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	Benzo(a)anthracene	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Benzo(a)anthracene	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Benzo(a)pyrene	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	Benzo(a)pyrene	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Benzo(a)pyrene	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Benzo(g,h,i)perylene	E	1	0	18	18	9.2	na
Columbia River	Semivolatiles	Benzo(g,h,i)perylene	FS	6	0	18	20	9.5	0.27
Columbia River	Semivolatiles	Benzo(g,h,i)perylene	WB	6	0	18	20	9.5	0.26
Columbia River	Semivolatiles	Benzo[b]Fluoranthene	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	Benzo[b]Fluoranthene	FS	6	0	9.2	9.9	4.8	0.13

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Semivolatiles	Benzo[b]Fluoranthene	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Benzo[k]fluoranthene	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	Benzo[k]fluoranthene	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Benzo[k]fluoranthene	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	bis(2-Chloroisopropyl)ether	E	1	0	18	18	9.2	na
Columbia River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	6	0	18	20	9.5	0.27
Columbia River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	6	0	18	20	9.5	0.26
Columbia River	Semivolatiles	Chrysene	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	Chrysene	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Chrysene	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Dibenz[a,h]anthracene	E	1	0	18	18	9.2	na
Columbia River	Semivolatiles	Dibenz[a,h]anthracene	FS	6	0	18	20	9.5	0.27
Columbia River	Semivolatiles	Dibenz[a,h]anthracene	WB	6	0	18	20	9.5	0.26
Columbia River	Semivolatiles	Dibenzofuran	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	Dibenzofuran	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Dibenzofuran	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Fluoranthene	E	1	0	18	18	9.2	na
Columbia River	Semivolatiles	Fluoranthene	FS	6	0	18	20	9.5	0.27
Columbia River	Semivolatiles	Fluoranthene	WB	6	0	18	20	9.5	0.26
Columbia River	Semivolatiles	9H-Fluorene	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	9H-Fluorene	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	9H-Fluorene	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Hexachlorobutadiene	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	Hexachlorobutadiene	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Hexachlorobutadiene	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Hexachloroethane	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	Hexachloroethane	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Hexachloroethane	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Indeno(1,2,3-cd)pyrene	E	1	0	18	18	9.2	na
Columbia River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	6	0	18	20	9.5	0.27
Columbia River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	6	0	18	20	9.5	0.26
Columbia River	Semivolatiles	Naphthalene	E	1	0	22	22	11	na
Columbia River	Semivolatiles	Naphthalene	FS	6	0	9.6	23	7.4	3.3
Columbia River	Semivolatiles	Naphthalene	WB	6	0	9.2	31	6.9	4.4
Columbia River	Semivolatiles	Naphthalene, 1-methyl-	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	Naphthalene, 1-methyl-	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Naphthalene, 1-methyl-	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Naphthalene, 2-methyl-	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	Naphthalene, 2-methyl-	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Naphthalene, 2-methyl-	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Nitrobenzene	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	Nitrobenzene	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Nitrobenzene	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Phenanthrene	E	1	0	9.2	9.2	4.6	na
Columbia River	Semivolatiles	Phenanthrene	FS	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Phenanthrene	WB	6	0	9.2	9.9	4.8	0.13
Columbia River	Semivolatiles	Pyrene	E	1	0	18	18	9.2	na
Columbia River	Semivolatiles	Pyrene	FS	6	0	18	20	9.5	0.27
Columbia River	Semivolatiles	Pyrene	WB	6	0	18	20	9.5	0.26
Columbia River	Semivolatiles	Retene	E	1	0	18	18	9.2	na
Columbia River	Semivolatiles	Retene	FS	6	0	18	20	9.5	0.27
Columbia River	Semivolatiles	Retene	WB	6	0	18	20	9.5	0.26
Hood River	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000010	0.000040	0.000020	0.000018
Hood River	Dioxin/furans	2,3,7,8-TCDD	WB	3	1	0.000020	0.000040	0.000020	0.000017
Hood River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	3	0.000050	0.00012	0.000080	0.000036
Hood River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.000010	0.000050	0.000012	0.000012
Hood River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	1	0.000020	0.000030	0.000017	0.0000029
Hood River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000020	0.000040	0.000013	0.0000058
Hood River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	1	0.000030	0.000040	0.000023	0.000014
Hood River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	0	0.000020	0.000040	0.000013	0.0000058
Hood River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000020	0.000060	0.000030	0.000026
Hood River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	2	0.000020	0.000090	0.000053	0.000040
Hood River	Dioxin/furans	OCDD	FS	3	2	0.000060	0.00014	0.000093	0.000057
Hood River	Dioxin/furans	OCDD	WB	3	1	0.000030	0.00013	0.000053	0.000066
Hood River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00018	0.00045	0.00030	0.00014
Hood River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00028	0.00048	0.00035	0.00012
Hood River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.000030	0.00012	0.000070	0.000046
Hood River	Dioxin/furans	1,2,3,4,7,8-PeCDF	WB	3	0	0.000020	0.000030	0.000012	0.0000029
Hood River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	2	0.000020	0.00032	0.00013	0.00016
Hood River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00013	0.00037	0.00023	0.00012
Hood River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	2	0.000010	0.000030	0.000022	0.000014
Hood River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
Hood River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
Hood River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	1	0.000010	0.000050	0.000022	0.000025

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Hood River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
Hood River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
Hood River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
Hood River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	1	0.000010	0.000070	0.000028	0.000036
Hood River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	1	0.000020	0.000040	0.000022	0.000016
Hood River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000020	0.000050	0.000015	0.0000087
Hood River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000020	0.000040	0.000015	0.0000050
Hood River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000020	0.000050	0.000015	0.0000087
Hood River	Dioxin/furans	OCDF	FS	3	0	0.000030	0.000070	0.000022	0.000012
Hood River	Dioxin/furans	OCDF	WB	3	0	0.000030	0.000050	0.000018	0.0000058
Hood River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	950	990	490	11
Hood River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	720	990	440	73
Hood River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	950	990	490	11
Hood River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	720	990	440	73
Hood River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	950	990	490	11
Hood River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	720	990	440	73
Hood River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	950	990	490	11
Hood River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	720	990	440	73
Hood River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	950	990	490	11
Hood River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	720	990	440	73
Hood River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	380	400	190	4.2
Hood River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	290	400	180	29
Hood River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	950	990	490	11
Hood River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	720	990	440	73
Hood River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	380	400	190	4.2
Hood River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	290	400	180	29
Hood River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	380	400	190	4.2
Hood River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	290	400	180	29
Hood River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	380	400	190	4.2
Hood River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	290	400	180	29
Hood River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	380	400	190	4.2
Hood River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	290	400	180	29
Hood River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	950	990	490	11
Hood River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	720	990	440	73
Hood River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	380	400	190	4.2
Hood River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	290	400	180	29
Hood River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	380	400	190	4.2
Hood River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	290	400	180	29
Hood River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	380	400	190	4.2
Hood River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	290	400	180	29
Hood River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	380	400	190	4.2
Hood River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	290	400	180	29
Hood River	Guaiacols/Phenols	Phenol	FS	3	0	380	400	190	4.2
Hood River	Guaiacols/Phenols	Phenol	WB	3	0	290	400	180	29
Hood River	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
Hood River	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
Hood River	Metals	Antimony	FS	3	0	50	50	25	0.00
Hood River	Metals	Antimony	WB	3	0	50	50	25	0.00
Hood River	Metals	Arsenic	FS	3	3	500	1,500	930	500
Hood River	Metals	Arsenic	WB	3	3	430	1,200	890	410
Hood River	Metals	Barium	FS	3	0	200	200	100	0.00
Hood River	Metals	Barium	WB	3	1	200	220	140	69
Hood River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Hood River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Hood River	Metals	Cadmium	FS	3	3	4.6	6.1	5.4	0.75
Hood River	Metals	Cadmium	WB	3	3	59	71	64	6.1
Hood River	Metals	Chromium	FS	3	3	150	210	170	32
Hood River	Metals	Chromium	WB	3	2	100	200	130	76
Hood River	Metals	Cobalt	FS	3	3	140	200	160	34
Hood River	Metals	Cobalt	WB	3	3	170	190	180	12
Hood River	Metals	Copper	FS	3	3	690	830	750	70
Hood River	Metals	Copper	WB	3	3	2,900	3,600	3,200	380
Hood River	Metals	Lead	FS	3	0	10	10	5.0	0.00
Hood River	Metals	Lead	WB	3	0	10	10	5.0	0.00
Hood River	Metals	Manganese	FS	3	3	110	150	130	21
Hood River	Metals	Manganese	WB	3	3	410	570	480	82
Hood River	Metals	Mercury	FS	3	3	110	180	140	38
Hood River	Metals	Mercury	WB	3	2	100	110	88	33
Hood River	Metals	Nickel	FS	3	3	53	58	55	2.6
Hood River	Metals	Nickel	WB	3	3	53	80	65	14
Hood River	Metals	Selenium	FS	3	3	340	400	370	30
Hood River	Metals	Selenium	WB	3	3	800	940	860	73
Hood River	Metals	Silver	FS	3	0	100	100	50	0.00
Hood River	Metals	Silver	WB	3	0	100	100	50	0.00
Hood River	Metals	Thallium	FS	3	0	50	50	25	0.00
Hood River	Metals	Thallium	WB	3	0	50	50	25	0.00

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Hood River	Metals	Vanadium	FS	3	0	10	10	5.0	0.00
Hood River	Metals	Vanadium	WB	3	3	13	120	70	55
Hood River	Metals	Zinc	FS	3	3	6,300	6,700	6,400	250
Hood River	Metals	Zinc	WB	3	3	22,000	28,000	24,000	3,300
Hood River	PCBs	Aroclor 1016	FS	3	0	16	19	8.8	0.76
Hood River	PCBs	Aroclor 1016	WB	3	0	18	18	9.0	0.00
Hood River	PCBs	Aroclor 1221	FS	3	0	16	19	8.8	0.76
Hood River	PCBs	Aroclor 1221	WB	3	0	18	18	9.0	0.00
Hood River	PCBs	Aroclor 1232	FS	3	0	16	19	8.8	0.76
Hood River	PCBs	Aroclor 1232	WB	3	0	18	18	9.0	0.00
Hood River	PCBs	Aroclor 1242	FS	3	0	16	19	8.8	0.76
Hood River	PCBs	Aroclor 1242	WB	3	0	18	18	9.0	0.00
Hood River	PCBs	Aroclor 1248	FS	3	0	16	19	8.8	0.76
Hood River	PCBs	Aroclor 1248	WB	3	0	18	18	9.0	0.00
Hood River	PCBs	Aroclor 1254	FS	3	3	8.4	12	10	1.9
Hood River	PCBs	Aroclor 1254	WB	3	3	8.9	13	11	2.1
Hood River	PCBs	Aroclor 1260	FS	3	3	5.8	8.5	6.7	1.5
Hood River	PCBs	Aroclor 1260	WB	3	3	6.4	9.6	8.1	1.6
Hood River	PCBs	PCB 077	FS	3	3	0.0082	0.018	0.013	0.0052
Hood River	PCBs	PCB 077	WB	3	3	0.012	0.019	0.015	0.0038
Hood River	PCBs	PCB 105	FS	3	3	0.15	0.30	0.22	0.078
Hood River	PCBs	PCB 105	WB	3	3	0.20	0.32	0.25	0.060
Hood River	PCBs	PCB 114	FS	3	3	0.016	0.030	0.022	0.0074
Hood River	PCBs	PCB 114	WB	3	3	0.020	0.033	0.025	0.0068
Hood River	PCBs	PCB 118	FS	3	3	0.37	0.72	0.52	0.18
Hood River	PCBs	PCB 118	WB	3	3	0.49	0.76	0.61	0.14
Hood River	PCBs	PCB 123	FS	3	3	0.0069	0.011	0.0082	0.0021
Hood River	PCBs	PCB 123	WB	3	3	0.011	0.014	0.012	0.0015
Hood River	PCBs	PCB 126	FS	3	3	0.0018	0.0056	0.0036	0.0019
Hood River	PCBs	PCB 126	WB	3	1	0.00067	0.0057	0.0022	0.0031
Hood River	PCBs	PCB 156	FS	3	3	0.034	0.081	0.053	0.025
Hood River	PCBs	PCB 156	WB	3	3	0.043	0.076	0.059	0.017
Hood River	PCBs	PCB 157	FS	3	3	0.0084	0.025	0.015	0.0091
Hood River	PCBs	PCB 157	WB	3	3	0.011	0.025	0.017	0.0070
Hood River	PCBs	PCB 167	FS	3	3	0.022	0.046	0.032	0.012
Hood River	PCBs	PCB 167	WB	3	3	0.028	0.047	0.036	0.0096
Hood River	PCBs	PCB 169	FS	3	0	0.0025	0.0039	0.0015	0.00041
Hood River	PCBs	PCB 169	WB	3	0	0.0023	0.0032	0.0014	0.00025
Hood River	PCBs	PCB 170	FS	3	3	0.060	0.13	0.090	0.035
Hood River	PCBs	PCB 170	WB	3	3	0.076	0.13	0.10	0.025
Hood River	PCBs	PCB 180	FS	3	3	0.20	0.38	0.27	0.098
Hood River	PCBs	PCB 180	WB	3	3	0.24	0.39	0.31	0.077
Hood River	PCBs	PCB 189	FS	3	3	0.0023	0.0062	0.0038	0.0021
Hood River	PCBs	PCB 189	WB	3	3	0.0025	0.0047	0.0037	0.0011
Hood River	Pesticides	Aldrin	FS	3	0	1.6	1.9	0.88	0.076
Hood River	Pesticides	Aldrin	WB	3	0	1.8	1.8	0.90	0.00
Hood River	Pesticides	Alpha-BHC	FS	3	0	1.6	1.9	0.88	0.076
Hood River	Pesticides	Alpha-BHC	WB	3	0	1.8	1.8	0.90	0.00
Hood River	Pesticides	Alpha-Chlordane	FS	3	0	1.6	1.9	0.88	0.076
Hood River	Pesticides	Alpha-Chlordane	WB	3	0	1.8	1.8	0.90	0.00
Hood River	Pesticides	Beta-BHC	FS	3	0	1.6	1.9	0.88	0.076
Hood River	Pesticides	Beta-BHC	WB	3	0	1.8	1.8	0.90	0.00
Hood River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.6	1.9	0.88	0.076
Hood River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.8	1.8	0.90	0.00
Hood River	Pesticides	cis-Nonachlor	FS	3	2	1.5	1.9	1.4	0.39
Hood River	Pesticides	cis-Nonachlor	WB	3	2	1.5	1.9	1.4	0.50
Hood River	Pesticides	DDD-o,p'	FS	3	0	1.6	1.9	0.88	0.076
Hood River	Pesticides	DDD-o,p'	WB	3	0	1.8	1.8	0.90	0.00
Hood River	Pesticides	DDE-o,p'	FS	3	0	1.6	1.9	0.88	0.076
Hood River	Pesticides	DDE-o,p'	WB	3	1	1.5	1.8	1.1	0.35
Hood River	Pesticides	DDT-o,p'	FS	3	0	1.6	1.9	0.88	0.076
Hood River	Pesticides	DDT-o,p'	WB	3	0	1.8	1.8	0.90	0.00
Hood River	Pesticides	DDD-p,p'	FS	3	3	2.0	5.3	3.2	1.9
Hood River	Pesticides	DDD-p,p'	WB	3	3	2.1	6.2	3.9	2.1
Hood River	Pesticides	DDE-p,p'	FS	3	3	7.5	11	9.4	1.8
Hood River	Pesticides	DDE-p,p'	WB	3	3	7.9	15	11	3.7
Hood River	Pesticides	DDT-p,p'	FS	3	3	2.2	4.5	3.0	1.3
Hood River	Pesticides	DDT-p,p'	WB	3	3	1.4	3.6	2.6	1.1
Hood River	Pesticides	DDMU	FS	3	2	1.3	1.9	1.4	0.48
Hood River	Pesticides	DDMU	WB	3	2	1.5	1.8	1.4	0.46
Hood River	Pesticides	Delta-BHC	FS	3	0	1.6	1.9	0.88	0.076
Hood River	Pesticides	Delta-BHC	WB	3	0	1.8	1.8	0.90	0.00
Hood River	Pesticides	Endosulfan Sulfate	FS	3	0	1.6	1.9	0.88	0.076
Hood River	Pesticides	Endosulfan Sulfate	WB	3	0	1.8	1.8	0.90	0.00
Hood River	Pesticides	Gamma-Chlordane	FS	3	0	1.6	1.9	0.88	0.076
Hood River	Pesticides	Gamma-Chlordane	WB	3	0	1.8	1.8	0.90	0.00

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Hood River	Pesticides	gamma-Chlordene	FS	3	0	1.6	1.9	0.88	0.076
Hood River	Pesticides	gamma-Chlordene	WB	3	0	1.8	1.8	0.90	0.00
Hood River	Pesticides	Heptachlor	FS	3	0	1.6	1.9	0.88	0.076
Hood River	Pesticides	Heptachlor	WB	3	0	1.8	1.8	0.90	0.00
Hood River	Pesticides	Heptachlor Epoxide	FS	3	0	1.6	1.9	0.88	0.076
Hood River	Pesticides	Heptachlor Epoxide	WB	3	0	1.8	1.8	0.90	0.00
Hood River	Pesticides	Hexachlorobenzene	FS	3	3	1.0	1.4	1.2	0.21
Hood River	Pesticides	Hexachlorobenzene	WB	3	3	1.4	2.1	1.7	0.38
Hood River	Pesticides	Lindane	FS	3	0	1.6	1.9	0.88	0.076
Hood River	Pesticides	Lindane	WB	3	0	1.8	1.8	0.90	0.00
Hood River	Pesticides	Mirex	FS	3	0	1.6	1.9	0.88	0.076
Hood River	Pesticides	Mirex	WB	3	0	1.8	1.8	0.90	0.00
Hood River	Pesticides	Oxychlordane	FS	3	0	1.6	1.9	0.88	0.076
Hood River	Pesticides	Oxychlordane	WB	3	0	1.8	1.8	0.90	0.00
Hood River	Pesticides	Pentachloroanisol	FS	3	0	1.6	1.9	0.88	0.076
Hood River	Pesticides	Pentachloroanisol	WB	3	1	0.91	1.8	0.90	0.0058
Hood River	Pesticides	Toxaphene	FS	3	0	48	57	27	2.3
Hood River	Pesticides	Toxaphene	WB	3	0	53	55	27	0.58
Hood River	Pesticides	trans-Nonachlor	FS	3	2	1.6	2.4	1.7	0.73
Hood River	Pesticides	trans-Nonachlor	WB	3	2	1.8	2.2	1.6	0.67
Hood River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.5	100	21	27
Hood River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	19	20	9.7	0.32
Hood River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	14	20	8.9	1.5
Hood River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	38	40	19	0.42
Hood River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	29	40	18	2.9
Hood River	Semivolatiles	2-Chloronaphthalene	FS	3	0	19	20	9.7	0.24
Hood River	Semivolatiles	2-Chloronaphthalene	WB	3	0	14	20	8.9	1.5
Hood River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	Acenaphthene	FS	3	0	19	20	9.7	0.24
Hood River	Semivolatiles	Acenaphthene	WB	3	0	14	20	8.9	1.5
Hood River	Semivolatiles	Acenaphthylene	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	Acenaphthylene	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	Anthracene	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	Anthracene	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	Benzo(a)anthracene	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	Benzo(a)anthracene	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	Benzo(a)pyrene	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	19	20	9.7	0.24
Hood River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	14	20	8.9	1.5
Hood River	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	19	20	9.7	0.24
Hood River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	14	20	8.9	1.5
Hood River	Semivolatiles	Chrysene	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	Chrysene	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	19	20	9.7	0.24
Hood River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	14	20	8.9	1.5
Hood River	Semivolatiles	Dibenzofuran	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	Dibenzofuran	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	Fluoranthene	FS	3	0	19	20	9.7	0.24
Hood River	Semivolatiles	Fluoranthene	WB	3	0	14	20	8.9	1.5
Hood River	Semivolatiles	9H-Fluorene	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	9H-Fluorene	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	Hexachlorobutadiene	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	Hexachlorobutadiene	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	Hexachloroethane	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	Hexachloroethane	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	19	20	9.7	0.24
Hood River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	14	20	8.9	1.5
Hood River	Semivolatiles	Naphthalene	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	Naphthalene	WB	3	0	7.2	9.9	4.4	0.73

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Hood River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	Nitrobenzene	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	Nitrobenzene	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	Phenanthrene	FS	3	0	9.5	9.9	4.9	0.10
Hood River	Semivolatiles	Phenanthrene	WB	3	0	7.2	9.9	4.4	0.73
Hood River	Semivolatiles	Pyrene	FS	3	0	19	20	9.7	0.24
Hood River	Semivolatiles	Pyrene	WB	3	0	14	20	8.9	1.5
Hood River	Semivolatiles	Retene	FS	3	0	19	20	9.7	0.24
Hood River	Semivolatiles	Retene	WB	3	0	14	20	8.9	1.5
Klickitat River	Dioxin/furans	2,3,7,8-TCDD	FS	3	0	0.000020	0.000030	0.000013	0.0000029
Klickitat River	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000010	0.000030	0.000012	0.0000058
Klickitat River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000030	0.000080	0.000038	0.000036
Klickitat River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	1	0.000010	0.000090	0.000038	0.000045
Klickitat River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000020	0.000030	0.000012	0.0000029
Klickitat River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000010	0.000040	0.000010	0.0000087
Klickitat River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	0	0.000020	0.000030	0.000012	0.0000029
Klickitat River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	1	0.000010	0.000060	0.000028	0.000028
Klickitat River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000020	0.000030	0.000015	0.0000050
Klickitat River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	0	0.000010	0.000040	0.000010	0.0000087
Klickitat River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	1	0.000020	0.000060	0.000028	0.000028
Klickitat River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	1	0.000030	0.00011	0.000053	0.000050
Klickitat River	Dioxin/furans	OCDD	FS	3	1	0.000050	0.00023	0.000095	0.00012
Klickitat River	Dioxin/furans	OCDD	WB	3	1	0.000020	0.0026	0.00086	0.0015
Klickitat River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00035	0.00042	0.00038	0.000036
Klickitat River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00032	0.00056	0.00041	0.00013
Klickitat River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	0	0.000020	0.000040	0.000015	0.0000050
Klickitat River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	1	0.000030	0.00010	0.000047	0.000046
Klickitat River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00024	0.00025	0.00025	0.0000058
Klickitat River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	2	0.000050	0.00035	0.00018	0.00016
Klickitat River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000010	0.000050	0.000017	0.000010
Klickitat River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
Klickitat River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	0	0.000010	0.000040	0.000015	0.0000087
Klickitat River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
Klickitat River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000050	0.000017	0.000010
Klickitat River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
Klickitat River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000010	0.000050	0.000017	0.000010
Klickitat River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
Klickitat River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000020	0.000040	0.000017	0.0000058
Klickitat River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000010	0.000040	0.000012	0.0000076
Klickitat River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000020	0.000040	0.000017	0.0000058
Klickitat River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000040	0.000012	0.0000076
Klickitat River	Dioxin/furans	OCDF	FS	3	0	0.000040	0.000070	0.000027	0.0000076
Klickitat River	Dioxin/furans	OCDF	WB	3	0	0.000030	0.00025	0.000053	0.000062
Klickitat River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	840	970	460	39
Klickitat River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	910	1,000	480	23
Klickitat River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	840	970	460	39
Klickitat River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	910	1,000	480	23
Klickitat River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	840	970	460	39
Klickitat River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	910	1,000	480	23
Klickitat River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	840	970	460	39
Klickitat River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	910	1,000	480	23
Klickitat River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	840	970	460	39
Klickitat River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	910	1,000	480	23
Klickitat River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	340	390	190	15
Klickitat River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	370	400	190	9.2
Klickitat River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	840	970	460	39
Klickitat River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	910	1,000	480	23
Klickitat River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	340	390	190	15
Klickitat River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	370	400	190	9.2
Klickitat River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	340	390	190	15
Klickitat River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	370	400	190	9.2
Klickitat River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	340	390	190	15
Klickitat River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	370	400	190	9.2
Klickitat River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	340	390	190	15
Klickitat River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	370	400	190	9.2
Klickitat River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	840	970	460	39
Klickitat River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	910	1,000	480	23
Klickitat River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	340	390	190	15
Klickitat River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	370	400	190	9.2
Klickitat River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	340	390	190	15
Klickitat River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	370	400	190	9.2
Klickitat River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	340	390	190	15
Klickitat River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	370	400	190	9.2

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Klickitat River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	340	390	190	15
Klickitat River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	370	400	190	9.2
Klickitat River	Guaiacols/Phenols	Phenol	FS	3	0	340	390	190	15
Klickitat River	Guaiacols/Phenols	Phenol	WB	3	0	370	400	190	9.2
Klickitat River	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
Klickitat River	Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
Klickitat River	Metals	Antimony	FS	3	0	50	50	25	0.00
Klickitat River	Metals	Antimony	WB	3	0	50	50	25	0.00
Klickitat River	Metals	Arsenic	FS	3	3	570	810	660	130
Klickitat River	Metals	Arsenic	WB	3	3	600	800	670	110
Klickitat River	Metals	Barium	FS	3	0	200	200	100	0.00
Klickitat River	Metals	Barium	WB	3	0	200	200	100	0.00
Klickitat River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Klickitat River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Klickitat River	Metals	Cadmium	FS	3	2	4.0	5.3	4.1	1.8
Klickitat River	Metals	Cadmium	WB	3	3	41	53	46	6.2
Klickitat River	Metals	Chromium	FS	3	0	100	100	50	0.00
Klickitat River	Metals	Chromium	WB	3	3	130	240	180	56
Klickitat River	Metals	Cobalt	FS	3	3	5.9	7.6	7.0	0.95
Klickitat River	Metals	Cobalt	WB	3	3	88	130	110	23
Klickitat River	Metals	Copper	FS	3	3	540	580	560	16
Klickitat River	Metals	Copper	WB	3	3	3,800	6,800	5,400	1,500
Klickitat River	Metals	Lead	FS	3	0	10	10	5.0	0.00
Klickitat River	Metals	Lead	WB	3	3	54	360	170	170
Klickitat River	Metals	Manganese	FS	3	3	120	160	140	23
Klickitat River	Metals	Manganese	WB	3	3	310	650	450	170
Klickitat River	Metals	Mercury	FS	3	3	100	130	120	16
Klickitat River	Metals	Mercury	WB	3	3	57	120	82	34
Klickitat River	Metals	Nickel	FS	3	1	30	35	22	12
Klickitat River	Metals	Nickel	WB	3	3	170	17,000	5,900	9,600
Klickitat River	Metals	Selenium	FS	3	3	310	350	340	23
Klickitat River	Metals	Selenium	WB	3	3	700	770	720	39
Klickitat River	Metals	Silver	FS	3	0	100	100	50	0.00
Klickitat River	Metals	Silver	WB	3	0	100	100	50	0.00
Klickitat River	Metals	Thallium	FS	3	0	50	50	25	0.00
Klickitat River	Metals	Thallium	WB	3	0	50	50	25	0.00
Klickitat River	Metals	Vanadium	FS	3	2	10	24	16	9.7
Klickitat River	Metals	Vanadium	WB	3	3	30	58	41	15
Klickitat River	Metals	Zinc	FS	3	3	6,500	7,600	7,100	580
Klickitat River	Metals	Zinc	WB	3	3	20,000	23,000	22,000	2,000
Klickitat River	PCBs	Aroclor 1016	FS	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1016	WB	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1221	FS	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1221	WB	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1232	FS	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1232	WB	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1242	FS	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1242	WB	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1248	FS	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1248	WB	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1254	FS	3	3	13	18	15	2.6
Klickitat River	PCBs	Aroclor 1254	WB	3	3	13	24	19	5.7
Klickitat River	PCBs	Aroclor 1260	FS	3	0	19	20	9.8	0.29
Klickitat River	PCBs	Aroclor 1260	WB	3	0	19	20	9.8	0.29
Klickitat River	PCBs	PCB 077	FS	3	3	0.011	0.016	0.014	0.0021
Klickitat River	PCBs	PCB 077	WB	3	3	0.011	0.022	0.016	0.0060
Klickitat River	PCBs	PCB 105	FS	3	3	0.19	0.24	0.21	0.023
Klickitat River	PCBs	PCB 105	WB	3	3	0.20	0.32	0.26	0.062
Klickitat River	PCBs	PCB 114	FS	3	3	0.019	0.025	0.021	0.0032
Klickitat River	PCBs	PCB 114	WB	3	3	0.021	0.032	0.026	0.0058
Klickitat River	PCBs	PCB 118	FS	3	3	0.46	0.58	0.51	0.064
Klickitat River	PCBs	PCB 118	WB	3	3	0.50	0.78	0.63	0.14
Klickitat River	PCBs	PCB 123	FS	3	3	0.0076	0.0092	0.0082	0.00088
Klickitat River	PCBs	PCB 123	WB	3	3	0.0097	0.011	0.010	0.00077
Klickitat River	PCBs	PCB 126	FS	3	3	0.0040	0.0047	0.0044	0.00036
Klickitat River	PCBs	PCB 126	WB	3	2	0.00083	0.0058	0.0036	0.0028
Klickitat River	PCBs	PCB 156	FS	3	3	0.044	0.051	0.046	0.0041
Klickitat River	PCBs	PCB 156	WB	3	3	0.041	0.081	0.058	0.021
Klickitat River	PCBs	PCB 157	FS	3	3	0.012	0.014	0.013	0.0010
Klickitat River	PCBs	PCB 157	WB	3	3	0.013	0.022	0.017	0.0047
Klickitat River	PCBs	PCB 167	FS	3	3	0.028	0.033	0.030	0.0029
Klickitat River	PCBs	PCB 167	WB	3	3	0.027	0.043	0.035	0.0079
Klickitat River	PCBs	PCB 169	FS	3	0	0.0010	0.0010	0.00050	0.00
Klickitat River	PCBs	PCB 169	WB	3	0	0.0010	0.0010	0.00050	0.00
Klickitat River	PCBs	PCB 170	FS	3	3	0.078	0.10	0.088	0.014
Klickitat River	PCBs	PCB 170	WB	3	3	0.084	0.13	0.11	0.023

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Klickitat River	PCBs	PCB 180	FS	3	3	0.24	0.33	0.28	0.046
Klickitat River	PCBs	PCB 180	WB	3	3	0.26	0.39	0.33	0.066
Klickitat River	PCBs	PCB 189	FS	3	3	0.0034	0.0041	0.0037	0.00040
Klickitat River	PCBs	PCB 189	WB	3	1	0.0010	0.0042	0.0017	0.0022
Klickitat River	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Aldrin	WB	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Alpha-BHC	WB	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Alpha-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Alpha-Chlordane	WB	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Beta-BHC	WB	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	3	1.2	1.3	1.2	0.058
Klickitat River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	2	1.6	2.3	1.6	0.65
Klickitat River	Pesticides	cis-Nonachlor	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	cis-Nonachlor	WB	3	2	1.4	2.1	1.5	0.56
Klickitat River	Pesticides	DDD-o,p'	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	DDD-o,p'	WB	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	DDE-o,p'	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	DDE-o,p'	WB	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	DDT-o,p'	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	DDT-o,p'	WB	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	DDD-p,p'	FS	3	3	2.1	2.5	2.3	0.20
Klickitat River	Pesticides	DDD-p,p'	WB	3	3	2.3	3.6	2.8	0.70
Klickitat River	Pesticides	DDE-p,p'	FS	3	3	5.1	5.8	5.5	0.35
Klickitat River	Pesticides	DDE-p,p'	WB	3	3	5.4	11	8.1	2.8
Klickitat River	Pesticides	DDT-p,p'	FS	3	2	1.9	2.1	1.7	0.59
Klickitat River	Pesticides	DDT-p,p'	WB	3	3	3.1	6.0	4.4	1.5
Klickitat River	Pesticides	DDMU	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	DDMU	WB	3	2	1.4	2.0	1.3	0.31
Klickitat River	Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Delta-BHC	WB	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Endosulfan Sulfate	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	#DIV/0!	#DIV/0!
Klickitat River	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Gamma-Chlordane	WB	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	gamma-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	gamma-Chlordane	WB	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Heptachlor	WB	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Heptachlor Epoxide	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Heptachlor Epoxide	WB	3	0	0.00	0.00	#DIV/0!	#DIV/0!
Klickitat River	Pesticides	Hexachlorobenzene	FS	3	3	1.3	1.5	1.4	0.12
Klickitat River	Pesticides	Hexachlorobenzene	WB	3	3	1.6	2.9	2.3	0.67
Klickitat River	Pesticides	Lindane	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Lindane	WB	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Mirex	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Mirex	WB	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Oxychlordane	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Oxychlordane	WB	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Pentachloroanisol	FS	3	0	1.9	2.0	0.98	0.029
Klickitat River	Pesticides	Pentachloroanisol	WB	3	1	1.7	2.0	1.2	0.40
Klickitat River	Pesticides	Toxaphene	FS	3	0	58	60	30	0.50
Klickitat River	Pesticides	Toxaphene	WB	3	0	58	60	30	0.50
Klickitat River	Pesticides	trans-Nonachlor	FS	3	3	1.2	1.2	1.2	2.1E-08
Klickitat River	Pesticides	trans-Nonachlor	WB	3	2	1.8	2.5	1.8	0.75
Klickitat River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	8.4	9.7	4.6	0.38
Klickitat River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	9.1	10	4.8	0.25
Klickitat River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.7	9.7	4.9	0.00
Klickitat River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	9.9	10	5.0	0.035
Klickitat River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	19	19	9.7	0.00
Klickitat River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	20	20	10.0	0.00
Klickitat River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	34	39	19	1.5
Klickitat River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	37	40	19	0.92
Klickitat River	Semivolatiles	2-Chloronaphthalene	FS	3	0	17	19	9.3	0.75
Klickitat River	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	20	9.7	0.46
Klickitat River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	8.4	9.7	4.6	0.38
Klickitat River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	9.1	10	4.8	0.25
Klickitat River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	8.4	9.7	4.6	0.38
Klickitat River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	9.1	10	4.8	0.25
Klickitat River	Semivolatiles	Acenaphthene	FS	3	0	17	19	9.3	0.75
Klickitat River	Semivolatiles	Acenaphthene	WB	3	0	18	20	9.7	0.46
Klickitat River	Semivolatiles	Acenaphthylene	FS	3	0	8.4	9.7	4.6	0.38
Klickitat River	Semivolatiles	Acenaphthylene	WB	3	0	9.1	10	4.8	0.25
Klickitat River	Semivolatiles	Anthracene	FS	3	0	8.4	9.7	4.6	0.38
Klickitat River	Semivolatiles	Anthracene	WB	3	0	9.1	10	4.8	0.25

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Klickitat River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	8.4	9.7	4.6	0.38
Klickitat River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	9.1	10	4.8	0.25
Klickitat River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	8.4	9.7	4.6	0.38
Klickitat River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	9.1	10	4.8	0.25
Klickitat River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	8.4	9.7	4.6	0.38
Klickitat River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	9.1	10	4.8	0.25
Klickitat River	Semivolatiles	Benzo(a)anthracene	FS	3	0	8.4	9.7	4.6	0.38
Klickitat River	Semivolatiles	Benzo(a)anthracene	WB	3	0	9.1	10	4.8	0.25
Klickitat River	Semivolatiles	Benzo(a)pyrene	FS	3	0	9.7	9.7	4.9	0.00
Klickitat River	Semivolatiles	Benzo(a)pyrene	WB	3	0	9.1	10	4.8	0.25
Klickitat River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	17	19	9.3	0.75
Klickitat River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	20	9.7	0.46
Klickitat River	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	8.4	9.7	4.6	0.38
Klickitat River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	9.1	10	4.8	0.25
Klickitat River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	8.4	9.7	4.6	0.38
Klickitat River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	9.1	10	4.8	0.25
Klickitat River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	17	19	9.3	0.75
Klickitat River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	20	9.7	0.46
Klickitat River	Semivolatiles	Chrysene	FS	3	0	8.4	9.7	4.6	0.38
Klickitat River	Semivolatiles	Chrysene	WB	3	0	9.1	10	4.8	0.25
Klickitat River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	17	19	9.3	0.75
Klickitat River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	20	9.7	0.46
Klickitat River	Semivolatiles	Dibenzofuran	FS	3	0	8.4	9.7	4.6	0.38
Klickitat River	Semivolatiles	Dibenzofuran	WB	3	0	9.1	10	4.8	0.25
Klickitat River	Semivolatiles	Fluoranthene	FS	3	0	17	19	9.3	0.75
Klickitat River	Semivolatiles	Fluoranthene	WB	3	0	18	20	9.7	0.46
Klickitat River	Semivolatiles	9H-Fluorene	FS	3	0	8.4	9.7	4.6	0.38
Klickitat River	Semivolatiles	9H-Fluorene	WB	3	0	9.1	10	4.8	0.25
Klickitat River	Semivolatiles	Hexachlorobutadiene	FS	3	0	8.4	9.7	4.6	0.38
Klickitat River	Semivolatiles	Hexachlorobutadiene	WB	3	0	9.1	10	4.8	0.25
Klickitat River	Semivolatiles	Hexachloroethane	FS	3	0	8.4	9.7	4.6	0.38
Klickitat River	Semivolatiles	Hexachloroethane	WB	3	0	9.1	10	4.8	0.25
Klickitat River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	17	19	9.3	0.75
Klickitat River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	20	9.7	0.46
Klickitat River	Semivolatiles	Naphthalene	FS	3	0	11	30	11	4.7
Klickitat River	Semivolatiles	Naphthalene	WB	3	0	31	70	23	10
Klickitat River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	8.4	9.7	4.6	0.38
Klickitat River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	9.1	10	4.8	0.25
Klickitat River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.7	11	5.0	0.32
Klickitat River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	9.9	10	5.1	0.13
Klickitat River	Semivolatiles	Nitrobenzene	FS	3	0	8.4	9.7	4.6	0.38
Klickitat River	Semivolatiles	Nitrobenzene	WB	3	0	9.1	10	4.8	0.25
Klickitat River	Semivolatiles	Phenanthrene	FS	3	0	8.4	9.7	4.6	0.38
Klickitat River	Semivolatiles	Phenanthrene	WB	3	0	9.1	10	4.8	0.25
Klickitat River	Semivolatiles	Pyrene	FS	3	0	17	19	9.3	0.75
Klickitat River	Semivolatiles	Pyrene	WB	3	0	18	20	9.7	0.46
Klickitat River	Semivolatiles	Retene	FS	3	0	17	19	9.3	0.75
Klickitat River	Semivolatiles	Retene	WB	3	0	18	20	9.7	0.46
Snake River	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000010	0.000050	0.000020	0.000026
Snake River	Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000010	0.000050	0.000013	0.000010
Snake River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	1	0.000010	0.000016	0.000058	0.000088
Snake River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	1	0.000010	0.000015	0.000053	0.000084
Snake River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	3	0.000080	0.00012	0.00010	0.000020
Snake River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	1	0.000010	0.00010	0.000038	0.000053
Snake River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	1	0.000010	0.000080	0.000032	0.000042
Snake River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000010	0.00010	0.000062	0.000050
Snake River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000010	0.000030	0.000015	0.000013
Snake River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
Snake River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	3	0.00012	0.00028	0.00020	0.000080
Snake River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00016	0.00023	0.00018	0.000040
Snake River	Dioxin/furans	OCDD	FS	3	3	0.00016	0.00036	0.00024	0.00011
Snake River	Dioxin/furans	OCDD	WB	3	3	0.00016	0.00035	0.00023	0.00011
Snake River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00037	0.00044	0.00040	0.000036
Snake River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00052	0.00058	0.00054	0.000032
Snake River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	2	0.000010	0.00011	0.000062	0.000053
Snake River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.000090	0.00013	0.00011	0.000020
Snake River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00014	0.00023	0.00018	0.000046
Snake River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00016	0.00034	0.00023	0.000095
Snake River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000010	0.000020	0.0000083	0.0000029
Snake River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	1	0.000010	0.000030	0.000015	0.000013
Snake River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	2	0.000020	0.000040	0.000030	0.000017
Snake River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	1	0.000010	0.000040	0.000017	0.000020
Snake River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	1	0.000010	0.000060	0.000025	0.000030
Snake River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	1	0.000010	0.000070	0.000028	0.000036
Snake River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	3	0.00013	0.00017	0.00016	0.000023
Snake River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00014	0.00017	0.00016	0.000015

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Snake River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000010	0.000090	0.000058	0.000046
Snake River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000020	0.000080	0.000053	0.000038
Snake River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Snake River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
Snake River	Dioxin/furans	OCDF	FS	3	0	0.000020	0.000040	0.000015	0.0000050
Snake River	Dioxin/furans	OCDF	WB	3	1	0.000010	0.000030	0.000015	0.000013
Snake River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	450	490	230	12
Snake River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	470	990	320	150
Snake River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	450	490	230	12
Snake River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	470	990	320	150
Snake River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	450	490	230	12
Snake River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	470	990	320	150
Snake River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	450	490	230	12
Snake River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	470	990	320	150
Snake River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	450	490	230	12
Snake River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	470	990	320	150
Snake River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	180	200	93	4.6
Snake River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	190	390	130	59
Snake River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	450	490	230	12
Snake River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	470	990	320	150
Snake River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	180	200	93	4.6
Snake River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	190	390	130	59
Snake River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	180	200	93	4.6
Snake River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	190	390	130	59
Snake River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	180	200	93	4.6
Snake River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	190	390	130	59
Snake River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	180	200	93	4.6
Snake River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	190	390	130	59
Snake River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	450	490	230	12
Snake River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	470	990	320	150
Snake River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	180	200	93	4.6
Snake River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	190	390	130	59
Snake River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	180	200	93	4.6
Snake River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	190	390	130	59
Snake River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	180	200	93	4.6
Snake River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	190	390	130	59
Snake River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	180	200	93	4.6
Snake River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	190	390	130	59
Snake River	Guaiacols/Phenols	Phenol	FS	3	0	180	200	93	4.6
Snake River	Guaiacols/Phenols	Phenol	WB	3	0	190	390	130	59
Snake River	Metals	Aluminum	FS	3	1	1,000	1,000	670	290
Snake River	Metals	Aluminum	WB	3	1	1,000	1,200	730	400
Snake River	Metals	Antimony	FS	3	0	50	50	25	0.00
Snake River	Metals	Antimony	WB	3	0	50	50	25	0.00
Snake River	Metals	Arsenic	FS	3	3	280	390	350	64
Snake River	Metals	Arsenic	WB	3	3	430	490	460	31
Snake River	Metals	Barium	FS	3	3	470	710	560	130
Snake River	Metals	Barium	WB	3	3	320	540	410	110
Snake River	Metals	Beryllium	FS	3	1	6.0	6.3	4.1	1.9
Snake River	Metals	Beryllium	WB	3	2	6.0	7.6	5.9	2.5
Snake River	Metals	Cadmium	FS	3	3	5.4	8.8	7.1	1.7
Snake River	Metals	Cadmium	WB	3	3	50	88	66	20
Snake River	Metals	Chromium	FS	3	0	100	100	50	0.00
Snake River	Metals	Chromium	WB	3	3	150	180	170	17
Snake River	Metals	Cobalt	FS	3	3	5.9	6.9	6.3	0.53
Snake River	Metals	Cobalt	WB	3	3	150	200	180	28
Snake River	Metals	Copper	FS	3	3	790	940	850	80
Snake River	Metals	Copper	WB	3	3	2,400	2,700	2,600	170
Snake River	Metals	Lead	FS	3	1	10	20	10	8.7
Snake River	Metals	Lead	WB	3	3	31	41	36	5.0
Snake River	Metals	Manganese	FS	3	3	130	160	140	14
Snake River	Metals	Manganese	WB	3	3	490	540	520	26
Snake River	Metals	Mercury	FS	3	3	98	210	140	61
Snake River	Metals	Mercury	WB	3	3	66	150	97	48
Snake River	Metals	Nickel	FS	3	3	31	59	45	14
Snake River	Metals	Nickel	WB	3	3	37	120	67	49
Snake River	Metals	Selenium	FS	3	3	250	270	260	12
Snake River	Metals	Selenium	WB	3	3	510	560	530	29
Snake River	Metals	Silver	FS	3	0	200	200	100	0.00
Snake River	Metals	Silver	WB	3	0	200	200	100	0.00
Snake River	Metals	Thallium	FS	3	0	50	50	25	0.00
Snake River	Metals	Thallium	WB	3	0	50	50	25	0.00
Snake River	Metals	Vanadium	FS	3	3	13	18	15	2.6
Snake River	Metals	Vanadium	WB	3	3	39	68	56	15
Snake River	Metals	Zinc	FS	3	3	8,500	8,900	8,700	240
Snake River	Metals	Zinc	WB	3	3	22,000	27,000	25,000	2,700

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Snake River	PCBs	Aroclor 1016	FS	3	0	19	20	9.8	0.29
Snake River	PCBs	Aroclor 1016	WB	3	0	20	20	10	0.00
Snake River	PCBs	Aroclor 1221	FS	3	0	19	20	9.8	0.29
Snake River	PCBs	Aroclor 1221	WB	3	0	20	20	10	0.00
Snake River	PCBs	Aroclor 1232	FS	3	0	19	20	9.8	0.29
Snake River	PCBs	Aroclor 1232	WB	3	0	20	20	10	0.00
Snake River	PCBs	Aroclor 1242	FS	3	0	19	20	9.8	0.29
Snake River	PCBs	Aroclor 1242	WB	3	0	20	20	10	0.00
Snake River	PCBs	Aroclor 1248	FS	3	0	19	20	9.8	0.29
Snake River	PCBs	Aroclor 1248	WB	3	0	20	20	10	0.00
Snake River	PCBs	Aroclor 1254	FS	3	3	16	17	16	0.58
Snake River	PCBs	Aroclor 1254	WB	3	3	15	29	22	7.0
Snake River	PCBs	Aroclor 1260	FS	3	0	19	20	9.8	0.29
Snake River	PCBs	Aroclor 1260	WB	3	0	20	20	10	0.00
Snake River	PCBs	PCB 077	FS	3	3	0.013	0.015	0.014	0.00091
Snake River	PCBs	PCB 077	WB	3	3	0.015	0.019	0.017	0.0019
Snake River	PCBs	PCB 105	FS	3	3	0.22	0.26	0.23	0.026
Snake River	PCBs	PCB 105	WB	3	3	0.23	0.31	0.28	0.044
Snake River	PCBs	PCB 114	FS	3	3	0.022	0.027	0.024	0.0029
Snake River	PCBs	PCB 114	WB	3	3	0.022	0.032	0.027	0.0051
Snake River	PCBs	PCB 118	FS	3	3	0.50	0.64	0.57	0.071
Snake River	PCBs	PCB 118	WB	3	3	0.55	0.72	0.67	0.10
Snake River	PCBs	PCB 123	FS	3	3	0.011	0.015	0.013	0.0021
Snake River	PCBs	PCB 123	WB	3	3	0.013	0.018	0.015	0.0027
Snake River	PCBs	PCB 126	FS	3	3	0.0033	0.0050	0.0042	0.00084
Snake River	PCBs	PCB 126	WB	3	3	0.0046	0.0059	0.0053	0.00069
Snake River	PCBs	PCB 156	FS	3	3	0.045	0.062	0.053	0.0085
Snake River	PCBs	PCB 156	WB	3	3	0.053	0.073	0.065	0.011
Snake River	PCBs	PCB 157	FS	3	3	0.013	0.017	0.015	0.0022
Snake River	PCBs	PCB 157	WB	3	3	0.013	0.019	0.017	0.0033
Snake River	PCBs	PCB 167	FS	3	3	0.030	0.040	0.034	0.0053
Snake River	PCBs	PCB 167	WB	3	3	0.032	0.044	0.039	0.0062
Snake River	PCBs	PCB 169	FS	3	0	0.0010	0.0010	0.00050	0.00
Snake River	PCBs	PCB 169	WB	3	0	0.0010	0.0016	0.00059	0.00016
Snake River	PCBs	PCB 170	FS	3	3	0.095	0.12	0.11	0.014
Snake River	PCBs	PCB 170	WB	3	3	0.10	0.14	0.12	0.018
Snake River	PCBs	PCB 180	FS	3	3	0.28	0.37	0.32	0.049
Snake River	PCBs	PCB 180	WB	3	3	0.31	0.42	0.38	0.058
Snake River	PCBs	PCB 189	FS	3	3	0.0033	0.0046	0.0039	0.00065
Snake River	PCBs	PCB 189	WB	3	3	0.0036	0.0053	0.0045	0.00085
Snake River	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Aldrin	WB	3	0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Alpha-BHC	WB	3	0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Alpha-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Alpha-Chlordane	WB	3	0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Beta-BHC	WB	3	0	2.0	2.0	1.0	0.00
Snake River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	1	1.6	2.0	1.2	0.35
Snake River	Pesticides	cis-Nonachlor	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	cis-Nonachlor	WB	3	3	2.1	2.3	2.2	0.12
Snake River	Pesticides	DDD-o,p'	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	DDD-o,p'	WB	3	3	1.8	1.9	1.8	0.058
Snake River	Pesticides	DDE-o,p'	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	DDE-o,p'	WB	3	3	1.7	1.9	1.8	0.12
Snake River	Pesticides	DDT-o,p'	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	DDT-o,p'	WB	3	3	1.9	2.3	2.1	0.21
Snake River	Pesticides	DDD-p,p'	FS	3	3	4.2	4.7	4.4	0.29
Snake River	Pesticides	DDD-p,p'	WB	3	3	8.4	9.5	9.1	0.59
Snake River	Pesticides	DDE-p,p'	FS	3	3	14	15	15	0.58
Snake River	Pesticides	DDE-p,p'	WB	3	3	18	33	28	8.4
Snake River	Pesticides	DDT-p,p'	FS	3	3	1.9	3.8	2.9	0.95
Snake River	Pesticides	DDT-p,p'	WB	3	3	3.7	3.9	3.8	0.12
Snake River	Pesticides	DDMU	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	DDMU	WB	3	3	2.0	2.4	2.2	0.20
Snake River	Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Delta-BHC	WB	3	0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	#DIV/0!	#DIV/0!
Snake River	Pesticides	Endosulfan Sulfate	WB	3	0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Gamma-Chlordane	WB	3	0	2.0	2.0	1.0	0.00
Snake River	Pesticides	gamma-Chlordane	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	gamma-Chlordane	WB	3	0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Heptachlor	WB	3	0	2.0	2.0	1.0	0.00

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Snake River	Pesticides	Heptachlor Epoxide	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Heptachlor Epoxide	WB	3	0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Hexachlorobenzene	FS	3	3	1.6	2.0	1.8	0.21
Snake River	Pesticides	Hexachlorobenzene	WB	3	3	2.6	3.2	2.9	0.31
Snake River	Pesticides	Lindane	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Lindane	WB	3	0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Mirex	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Mirex	WB	3	0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Oxychlordane	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Oxychlordane	WB	3	0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Pentachloroanisol	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	Pentachloroanisol	WB	3	0	2.0	2.0	1.0	0.00
Snake River	Pesticides	Toxaphene	FS	3	0	57	60	29	0.76
Snake River	Pesticides	Toxaphene	WB	3	0	59	60	30	0.29
Snake River	Pesticides	trans-Nonachlor	FS	3	0	1.9	2.0	0.98	0.029
Snake River	Pesticides	trans-Nonachlor	WB	3	3	2.8	3.2	3.0	0.21
Snake River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	9.0	9.8	4.7	0.22
Snake River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	9.3	52	12	12
Snake River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	18	20	9.3	0.46
Snake River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	19	100	24	24
Snake River	Semivolatiles	2-Chloronaphthalene	FS	3	0	9.0	9.8	4.7	0.22
Snake River	Semivolatiles	2-Chloronaphthalene	WB	3	0	9.3	52	12	12
Snake River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	Acenaphthene	FS	3	0	9.0	9.8	4.7	0.22
Snake River	Semivolatiles	Acenaphthene	WB	3	0	9.3	52	12	12
Snake River	Semivolatiles	Acenaphthylene	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	Acenaphthylene	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	Anthracene	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	Anthracene	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	Benzo(a)anthracene	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	Benzo(a)anthracene	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	Benzo(a)pyrene	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	Benzo(a)pyrene	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	9.0	9.8	4.7	0.22
Snake River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	9.3	52	12	12
Snake River	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	9.0	9.8	4.7	0.22
Snake River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	9.3	52	12	12
Snake River	Semivolatiles	Chrysene	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	Chrysene	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	9.0	9.8	4.7	0.22
Snake River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	9.3	52	12	12
Snake River	Semivolatiles	Dibenzofuran	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	Dibenzofuran	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	Fluoranthene	FS	3	0	9.0	9.8	4.7	0.22
Snake River	Semivolatiles	Fluoranthene	WB	3	0	9.3	52	12	12
Snake River	Semivolatiles	9H-Fluorene	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	9H-Fluorene	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	Hexachlorobutadiene	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	Hexachlorobutadiene	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	Hexachloroethane	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	Hexachloroethane	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	9.0	9.8	4.7	0.22
Snake River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	9.3	52	12	12
Snake River	Semivolatiles	Naphthalene	FS	3	0	14	18	7.8	1.1
Snake River	Semivolatiles	Naphthalene	WB	3	0	24	73	20	14
Snake River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	4.6	35	7.3	8.6

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Snake River	Semivolatiles	Nitrobenzene	FS	3	0	4.5	4.9	2.3	0.12
Snake River	Semivolatiles	Nitrobenzene	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	Phenanthrene	FS	3	0	4.5	4.9	2.4	0.12
Snake River	Semivolatiles	Phenanthrene	WB	3	0	4.6	26	5.9	6.1
Snake River	Semivolatiles	Pyrene	FS	3	0	9.0	9.8	4.7	0.22
Snake River	Semivolatiles	Pyrene	WB	3	0	9.3	52	12	12
Snake River	Semivolatiles	Retene	FS	3	0	9.0	9.8	4.7	0.22
Snake River	Semivolatiles	Retene	WB	3	0	9.3	52	12	12
Yakima River	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000020	0.000040	0.000022	0.000016
Yakima River	Dioxin/furans	2,3,7,8-TCDD	WB	3	2	0.000030	0.000030	0.000025	0.0000087
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	3	0.000040	0.000090	0.000067	0.000025
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	2	0.000020	0.000090	0.000050	0.000040
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	2	0.000010	0.000020	0.000015	0.0000087
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	1	0.000010	0.000030	0.000015	0.000013
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	1	0.000010	0.000050	0.000022	0.000025
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000010	0.000080	0.000052	0.000041
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000010	0.000040	0.000025	0.000018
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000020	0.000050	0.000030	0.000020
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000010	0.00015	0.000082	0.000073
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.000020	0.00019	0.00012	0.000089
Yakima River	Dioxin/furans	OCDD	FS	3	2	0.000010	0.00023	0.00014	0.00012
Yakima River	Dioxin/furans	OCDD	WB	3	3	0.00022	0.00027	0.00024	0.000026
Yakima River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00036	0.00051	0.00042	0.000078
Yakima River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00034	0.00060	0.00045	0.00013
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	1	0.000020	0.000090	0.000037	0.000046
Yakima River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	2	0.000020	0.00014	0.000083	0.000067
Yakima River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	2	0.000010	0.00016	0.000098	0.000082
Yakima River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	2	0.000020	0.00029	0.00017	0.00014
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	1	0.000010	0.000030	0.000013	0.000014
Yakima River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	1	0.000010	0.000020	0.000010	0.0000087
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	1	0.000010	0.000010	0.0000067	0.0000029
Yakima River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Yakima River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000020	0.0000067	0.0000029
Yakima River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	2	0.000010	0.000040	0.000022	0.000018
Yakima River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	1	0.000010	0.000030	0.000015	0.000013
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000010	0.000020	0.0000067	0.0000029
Yakima River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
Yakima River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	2	0.000010	0.000020	0.000013	0.0000058
Yakima River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
Yakima River	Dioxin/furans	OCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Yakima River	Dioxin/furans	OCDF	WB	3	1	0.000010	0.000060	0.000023	0.000032
Yakima River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	740	970	430	58
Yakima River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	900	990	480	23
Yakima River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	740	970	430	58
Yakima River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	900	990	480	23
Yakima River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	740	970	430	58
Yakima River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	900	990	480	23
Yakima River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	740	970	430	58
Yakima River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	900	990	480	23
Yakima River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	740	970	430	58
Yakima River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	900	990	480	23
Yakima River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	300	390	170	23
Yakima River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	360	400	190	9.2
Yakima River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	740	970	430	58
Yakima River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	900	990	480	23
Yakima River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	300	390	170	23
Yakima River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	360	400	190	9.2
Yakima River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	300	390	170	23
Yakima River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	360	400	190	9.2
Yakima River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	300	390	170	23
Yakima River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	360	400	190	9.2
Yakima River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	300	390	170	23
Yakima River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	360	400	190	9.2
Yakima River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	740	970	430	58
Yakima River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	900	990	480	23
Yakima River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	300	390	170	23
Yakima River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	360	400	190	9.2
Yakima River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	300	390	170	23
Yakima River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	360	400	190	9.2
Yakima River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	300	390	170	23
Yakima River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	360	400	190	9.2
Yakima River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	300	390	170	23
Yakima River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	360	400	190	9.2
Yakima River	Guaiacols/Phenols	Phenol	FS	3	0	300	390	170	23
Yakima River	Guaiacols/Phenols	Phenol	WB	3	0	360	400	190	9.2

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Metals	Aluminum	FS	3	1	840	1,000	610	200
Yakima River	Metals	Aluminum	WB	3	1	500	1,000	500	2.3
Yakima River	Metals	Antimony	FS	3	0	50	50	25	0.00
Yakima River	Metals	Antimony	WB	3	0	50	50	25	0.00
Yakima River	Metals	Arsenic	FS	3	3	290	410	360	61
Yakima River	Metals	Arsenic	WB	3	3	290	360	330	36
Yakima River	Metals	Barium	FS	3	1	200	210	140	64
Yakima River	Metals	Barium	WB	3	2	200	270	200	87
Yakima River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Yakima River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Yakima River	Metals	Cadmium	FS	3	3	5.8	8.0	6.9	1.1
Yakima River	Metals	Cadmium	WB	3	3	70	76	73	3.0
Yakima River	Metals	Chromium	FS	3	2	100	120	97	40
Yakima River	Metals	Chromium	WB	3	2	100	200	140	81
Yakima River	Metals	Cobalt	FS	3	3	81	170	110	53
Yakima River	Metals	Cobalt	WB	3	3	100	200	160	52
Yakima River	Metals	Copper	FS	3	3	770	820	790	25
Yakima River	Metals	Copper	WB	3	3	1,900	2,900	2,400	500
Yakima River	Metals	Lead	FS	3	0	10	10	5.0	0.00
Yakima River	Metals	Lead	WB	3	0	10	10	5.0	0.00
Yakima River	Metals	Manganese	FS	3	3	150	190	170	23
Yakima River	Metals	Manganese	WB	3	3	530	620	560	46
Yakima River	Metals	Mercury	FS	3	3	110	130	120	7.2
Yakima River	Metals	Mercury	WB	3	2	100	110	87	32
Yakima River	Metals	Nickel	FS	3	3	44	58	50	7.4
Yakima River	Metals	Nickel	WB	3	3	56	94	70	21
Yakima River	Metals	Selenium	FS	3	3	280	340	300	32
Yakima River	Metals	Selenium	WB	3	3	460	500	480	21
Yakima River	Metals	Silver	FS	3	0	100	100	50	0.00
Yakima River	Metals	Silver	WB	3	0	100	100	50	0.00
Yakima River	Metals	Thallium	FS	3	0	50	50	25	0.00
Yakima River	Metals	Thallium	WB	3	0	50	50	25	0.00
Yakima River	Metals	Vanadium	FS	3	0	20	20	10	0.00
Yakima River	Metals	Vanadium	WB	3	2	20	51	29	21
Yakima River	Metals	Zinc	FS	3	3	8,800	9,600	9,200	420
Yakima River	Metals	Zinc	WB	3	3	17,000	22,000	19,000	2,200
Yakima River	PCBs	Aroclor 1016	FS	3	0	18	20	9.5	0.50
Yakima River	PCBs	Aroclor 1016	WB	3	0	19	20	9.8	0.29
Yakima River	PCBs	Aroclor 1221	FS	3	0	18	20	9.5	0.50
Yakima River	PCBs	Aroclor 1221	WB	3	0	19	20	9.8	0.29
Yakima River	PCBs	Aroclor 1232	FS	3	0	18	20	9.5	0.50
Yakima River	PCBs	Aroclor 1232	WB	3	0	19	20	9.8	0.29
Yakima River	PCBs	Aroclor 1242	FS	3	0	18	20	9.5	0.50
Yakima River	PCBs	Aroclor 1242	WB	3	0	19	20	9.8	0.29
Yakima River	PCBs	Aroclor 1248	FS	3	0	18	20	9.5	0.50
Yakima River	PCBs	Aroclor 1248	WB	3	0	19	20	9.8	0.29
Yakima River	PCBs	Aroclor 1254	FS	3	3	10	17	15	4.0
Yakima River	PCBs	Aroclor 1254	WB	3	3	15	25	19	5.3
Yakima River	PCBs	Aroclor 1260	FS	3	2	6.6	20	8.0	1.8
Yakima River	PCBs	Aroclor 1260	WB	3	2	7.6	20	8.7	1.2
Yakima River	PCBs	PCB 077	FS	3	3	0.0097	0.020	0.015	0.0050
Yakima River	PCBs	PCB 077	WB	3	3	0.011	0.022	0.016	0.0054
Yakima River	PCBs	PCB 105	FS	3	3	0.16	0.26	0.22	0.053
Yakima River	PCBs	PCB 105	WB	3	3	0.18	0.31	0.24	0.066
Yakima River	PCBs	PCB 114	FS	3	3	0.017	0.026	0.022	0.0047
Yakima River	PCBs	PCB 114	WB	3	3	0.019	0.032	0.025	0.0063
Yakima River	PCBs	PCB 118	FS	3	3	0.37	0.60	0.51	0.13
Yakima River	PCBs	PCB 118	WB	3	3	0.42	0.76	0.58	0.17
Yakima River	PCBs	PCB 123	FS	3	3	0.0063	0.012	0.0098	0.0031
Yakima River	PCBs	PCB 123	WB	3	3	0.012	0.025	0.017	0.0073
Yakima River	PCBs	PCB 126	FS	3	2	0.00074	0.0038	0.0026	0.0019
Yakima River	PCBs	PCB 126	WB	3	2	0.0011	0.0050	0.0026	0.0023
Yakima River	PCBs	PCB 156	FS	3	3	0.039	0.061	0.051	0.011
Yakima River	PCBs	PCB 156	WB	3	3	0.054	0.071	0.060	0.0092
Yakima River	PCBs	PCB 157	FS	3	3	0.010	0.016	0.014	0.0030
Yakima River	PCBs	PCB 157	WB	3	3	0.013	0.018	0.015	0.0027
Yakima River	PCBs	PCB 167	FS	3	3	0.024	0.034	0.030	0.0059
Yakima River	PCBs	PCB 167	WB	3	3	0.030	0.044	0.036	0.0071
Yakima River	PCBs	PCB 169	FS	3	0	0.0010	0.0013	0.00055	0.000092
Yakima River	PCBs	PCB 169	WB	3	0	0.0012	0.0036	0.00100	0.00068
Yakima River	PCBs	PCB 170	FS	3	3	0.093	0.12	0.10	0.012
Yakima River	PCBs	PCB 170	WB	3	3	0.090	0.18	0.13	0.047
Yakima River	PCBs	PCB 180	FS	3	3	0.31	0.38	0.34	0.038
Yakima River	PCBs	PCB 180	WB	3	3	0.30	0.56	0.41	0.13
Yakima River	PCBs	PCB 189	FS	3	3	0.0025	0.0046	0.0035	0.0010
Yakima River	PCBs	PCB 189	WB	3	3	0.0032	0.0060	0.0043	0.0014

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Pesticides	Aldrin	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	Aldrin	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	Alpha-BHC	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	Alpha-BHC	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	Alpha-Chlordane	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	Alpha-Chlordane	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	Beta-BHC	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	Beta-BHC	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	cis-Nonachlor	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	cis-Nonachlor	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	DDD-o,p'	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	DDD-o,p'	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	DDE-o,p'	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	DDE-o,p'	WB	3	2	1.2	2.0	1.4	0.53
Yakima River	Pesticides	DDT-o,p'	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	DDT-o,p'	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	DDD-p,p'	FS	3	3	4.8	8.8	7.4	2.3
Yakima River	Pesticides	DDD-p,p'	WB	3	3	5.0	7.6	6.4	1.3
Yakima River	Pesticides	DDE-p,p'	FS	3	3	15	28	20	7.2
Yakima River	Pesticides	DDE-p,p'	WB	3	3	21	29	26	4.2
Yakima River	Pesticides	DDT-p,p'	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	DDT-p,p'	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	DDMU	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	DDMU	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	Delta-BHC	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	Delta-BHC	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	Endosulfan Sulfate	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	Endosulfan Sulfate	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	Gamma-Chlordane	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	Gamma-Chlordane	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	gamma-Chlordane	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	gamma-Chlordane	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	Heptachlor	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	Heptachlor	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	Heptachlor Epoxide	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	Heptachlor Epoxide	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	Hexachlorobenzene	FS	3	2	1.6	2.0	1.4	0.38
Yakima River	Pesticides	Hexachlorobenzene	WB	3	3	1.1	2.1	1.6	0.50
Yakima River	Pesticides	Lindane	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	Lindane	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	Mirex	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	Mirex	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	Oxychlordane	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	Oxychlordane	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	Pentachloroanisol	FS	3	0	1.8	2.0	0.95	0.050
Yakima River	Pesticides	Pentachloroanisol	WB	3	0	1.9	2.0	0.98	0.029
Yakima River	Pesticides	Toxaphene	FS	3	0	54	59	29	1.3
Yakima River	Pesticides	Toxaphene	WB	3	0	58	61	30	0.76
Yakima River	Pesticides	trans-Nonachlor	FS	3	2	1.5	2.0	1.4	0.40
Yakima River	Pesticides	trans-Nonachlor	WB	3	3	1.4	2.4	1.8	0.55
Yakima River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	15	19	8.7	1.2
Yakima River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	18	20	9.6	0.46
Yakima River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	30	39	17	2.3
Yakima River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	36	40	19	0.92
Yakima River	Semivolatiles	2-Chloronaphthalene	FS	3	0	15	19	8.7	1.2
Yakima River	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	20	9.6	0.46
Yakima River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	Acenaphthene	FS	3	0	15	19	8.7	1.2
Yakima River	Semivolatiles	Acenaphthene	WB	3	0	18	20	9.6	0.46
Yakima River	Semivolatiles	Acenaphthylene	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	Acenaphthylene	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	Anthracene	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	Anthracene	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	9.0	9.9	4.8	0.24

Appendix D-2: Tributary Summary Statistics
Steelhead

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Yakima River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	Benzo(a)anthracene	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	Benzo(a)anthracene	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	Benzo(a)pyrene	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	Benzo(a)pyrene	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	15	19	8.7	1.2
Yakima River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	20	9.6	0.46
Yakima River	Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	15	19	8.7	1.2
Yakima River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	20	9.6	0.46
Yakima River	Semivolatiles	Chrysene	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	Chrysene	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	15	19	8.7	1.2
Yakima River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	20	9.6	0.46
Yakima River	Semivolatiles	Dibenzofuran	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	Dibenzofuran	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	Fluoranthene	FS	3	0	15	19	8.7	1.2
Yakima River	Semivolatiles	Fluoranthene	WB	3	0	18	20	9.6	0.46
Yakima River	Semivolatiles	9H-Fluorene	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	9H-Fluorene	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	Hexachlorobutadiene	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	Hexachlorobutadiene	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	Hexachloroethane	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	Hexachloroethane	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	15	19	8.7	1.2
Yakima River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	20	9.6	0.46
Yakima River	Semivolatiles	Naphthalene	FS	3	0	7.4	11	4.6	0.90
Yakima River	Semivolatiles	Naphthalene	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	Nitrobenzene	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	Nitrobenzene	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	Phenanthrene	FS	3	0	7.4	9.6	4.3	0.57
Yakima River	Semivolatiles	Phenanthrene	WB	3	0	9.0	9.9	4.8	0.24
Yakima River	Semivolatiles	Pyrene	FS	3	0	15	19	8.7	1.2
Yakima River	Semivolatiles	Pyrene	WB	3	0	18	20	9.6	0.46
Yakima River	Semivolatiles	Retene	FS	3	0	15	19	8.7	1.2
Yakima River	Semivolatiles	Retene	WB	3	0	18	20	9.6	0.46

Appendix D-2: Tributary Summary Statistics
Eulachon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Dioxin/furans	2,3,7,8-TCDD	WB	3	2	0.000050	0.00010	0.000068	0.000039
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.000021	0.00028	0.00024	0.000036
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	1	0.000010	0.00017	0.000075	0.000085
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.000010	0.00026	0.00018	0.00011
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.000010	0.00017	0.00011	0.000060
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.000040	0.00060	0.00049	0.00010
Columbia River	Dioxin/furans	OCDD	WB	3	3	0.0013	0.0017	0.0015	0.00023
Columbia River	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00058	0.00078	0.00067	0.00010
Columbia River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.000080	0.00015	0.00011	0.000036
Columbia River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00010	0.00015	0.00013	0.000026
Columbia River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	2	0.000030	0.000090	0.000055	0.000031
Columbia River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	2	0.000050	0.00010	0.000065	0.000030
Columbia River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	3	0.000070	0.00020	0.00014	0.000066
Columbia River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00015	0.00021	0.00019	0.000032
Columbia River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000010	0.00026	0.00017	0.00014
Columbia River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	2	0.000020	0.00011	0.000058	0.000046
Columbia River	Dioxin/furans	OCDF	WB	3	3	0.00010	0.00027	0.00021	0.000095
Columbia River	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	740	830	390	25
Columbia River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	740	830	390	25
Columbia River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	740	830	390	25
Columbia River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	740	830	390	25
Columbia River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	740	830	390	25
Columbia River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	290	330	150	9.9
Columbia River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	740	830	390	25
Columbia River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	290	330	150	9.9
Columbia River	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	290	330	150	9.9
Columbia River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	290	330	150	9.9
Columbia River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	290	330	150	9.9
Columbia River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	740	830	390	25
Columbia River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	290	330	150	9.9
Columbia River	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	290	330	150	9.9
Columbia River	Guaiacols/Phenols	Phenol	WB	3	0	290	330	150	9.9
Columbia River	Metals	Aluminum	WB	3	1	6,500	20,000	8,800	2,000
Columbia River	Metals	Antimony	WB	3	0	50	50	25	0.00
Columbia River	Metals	Arsenic	WB	3	3	860	930	890	32
Columbia River	Metals	Barium	WB	3	1	200	350	180	140
Columbia River	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Columbia River	Metals	Cadmium	WB	3	3	8.5	10	9.2	0.75
Columbia River	Metals	Chromium	WB	3	0	100	100	50	0.00
Columbia River	Metals	Cobalt	WB	3	3	6.3	7.9	7.1	0.80
Columbia River	Metals	Copper	WB	3	3	920	970	940	26
Columbia River	Metals	Lead	WB	3	3	370	680	500	160
Columbia River	Metals	Manganese	WB	3	3	480	520	500	22
Columbia River	Metals	Mercury	WB	3	0	35	42	19	1.8
Columbia River	Metals	Nickel	WB	3	3	34	67	50	17
Columbia River	Metals	Selenium	WB	3	3	270	300	290	15
Columbia River	Metals	Silver	WB	3	0	100	100	50	0.00
Columbia River	Metals	Thallium	WB	3	0	50	50	25	0.00
Columbia River	Metals	Vanadium	WB	3	2	20	22	17	6.4
Columbia River	Metals	Zinc	WB	3	3	13,000	14,000	14,000	900
Columbia River	PCBs	Aroclor 1016	WB	3	0	37	38	19	0.29
Columbia River	PCBs	Aroclor 1221	WB	3	0	37	38	19	0.29
Columbia River	PCBs	Aroclor 1232	WB	3	0	37	38	19	0.29
Columbia River	PCBs	Aroclor 1242	WB	3	0	37	38	19	0.29
Columbia River	PCBs	Aroclor 1248	WB	3	0	37	38	19	0.29
Columbia River	PCBs	Aroclor 1254	WB	3	0	37	38	19	0.29
Columbia River	PCBs	Aroclor 1260	WB	3	0	37	38	19	0.29
Columbia River	PCBs	PCB 77	WB	3	3	0.0081	0.0083	0.0082	0.00012
Columbia River	PCBs	PCB 105	WB	3	3	0.15	0.15	0.15	0.0026
Columbia River	PCBs	PCB 114	WB	3	3	0.010	0.011	0.011	0.00051
Columbia River	PCBs	PCB 118	WB	3	3	0.28	0.29	0.29	0.0032
Columbia River	PCBs	PCB 123	WB	3	3	0.010	0.012	0.011	0.00087
Columbia River	PCBs	PCB 126	WB	3	0	0.0017	0.0021	0.00095	0.00012
Columbia River	PCBs	PCB 156	WB	3	3	0.028	0.030	0.029	0.0013
Columbia River	PCBs	PCB 157	WB	3	3	0.0081	0.0095	0.0087	0.00068
Columbia River	PCBs	PCB 167	WB	3	3	0.017	0.018	0.018	0.00068
Columbia River	PCBs	PCB 169	WB	3	0	0.00050	0.00055	0.00026	0.000014
Columbia River	PCBs	PCB 170	WB	3	3	0.058	0.064	0.062	0.0034
Columbia River	PCBs	PCB 180	WB	3	3	0.17	0.18	0.18	0.0074
Columbia River	PCBs	PCB 189	WB	3	3	0.0023	0.0025	0.0024	0.000075
Columbia River	Pesticides	Aldrin	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	Alpha-BHC	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	Alpha-Chlordene	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	Beta-BHC	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	cis-Nonachlor	WB	3	0	3.7	3.8	1.9	0.029

Appendix D-2: Tributary Summary Statistics
Eulachon

Watershed	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Columbia River	Pesticides	DDD-o,p'	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	DDE-o,p'	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	DDT-o,p'	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	DDD-p,p'	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	DDE-p,p'	WB	3	3	9.8	11	11	0.69
Columbia River	Pesticides	DDT-p,p'	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	DDMU	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	Delta-BHC	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	Endosulfan Sulfate	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	Gamma-Chlordane	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	Gamma-Chlordene	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	Heptachlor	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	Heptachlor Epoxide	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	Hexachlorobenzene	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	Lindane	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	Mirex	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	Oxychlordane	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	Pentachloroanisole	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Pesticides	Toxaphene	WB	3	0	110	110	55	0.00
Columbia River	Pesticides	trans-Nonachlor	WB	3	0	3.7	3.8	1.9	0.029
Columbia River	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	7.3	8.3	3.9	0.26
Columbia River	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	150	170	77	5.1
Columbia River	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	290	330	150	9.9
Columbia River	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	590	660	310	20
Columbia River	Semivolatiles	2-Chloronaphthalene	WB	3	0	150	170	77	5.1
Columbia River	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	150	170	77	5.1
Columbia River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	150	170	77	5.1
Columbia River	Semivolatiles	Acenaphthene	WB	3	0	290	330	150	9.9
Columbia River	Semivolatiles	Acenaphthylene	WB	3	0	150	170	77	5.1
Columbia River	Semivolatiles	Anthracene	WB	3	0	150	170	77	5.1
Columbia River	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	7.3	8.3	3.9	0.26
Columbia River	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	7.3	8.3	3.9	0.26
Columbia River	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	7.3	8.3	3.9	0.26
Columbia River	Semivolatiles	Benzo(a)anthracene	WB	3	0	150	170	77	5.1
Columbia River	Semivolatiles	Benzo(a)pyrene	WB	3	0	150	170	77	5.1
Columbia River	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	290	330	150	9.9
Columbia River	Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	290	330	150	9.9
Columbia River	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	290	330	150	9.9
Columbia River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	15	17	7.7	0.51
Columbia River	Semivolatiles	Chrysene	WB	3	0	150	170	77	5.1
Columbia River	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	290	330	150	9.9
Columbia River	Semivolatiles	Dibenzofuran	WB	3	0	150	170	77	5.1
Columbia River	Semivolatiles	Fluoranthene	WB	3	0	150	330	130	49
Columbia River	Semivolatiles	9H-Fluorene	WB	3	1	9.4	170	56	40
Columbia River	Semivolatiles	Hexachlorobutadiene	WB	3	0	7.3	8.3	3.9	0.26
Columbia River	Semivolatiles	Hexachloroethane	WB	3	0	7.3	8.3	3.9	0.26
Columbia River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	290	330	150	9.9
Columbia River	Semivolatiles	Naphthalene	WB	3	0	30	40	18	2.5
Columbia River	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	7.3	8.3	3.9	0.26
Columbia River	Semivolatiles	Naphthalene, 2-methyl-	WB	3	1	7.8	11	6.4	4.0
Columbia River	Semivolatiles	Nitrobenzene	WB	3	0	7.5	17	5.5	2.6
Columbia River	Semivolatiles	Phenanthrene	WB	3	1	21	170	60	34
Columbia River	Semivolatiles	Pyrene	WB	3	0	290	330	150	9.9
Columbia River	Semivolatiles	Retene	WB	3	0	290	330	150	9.9

Appendix D-2: Tributary Summary Statistics
Pacific Lamprey

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Fifteen Mile Creek	Dioxin/furans	2,3,7,8-TCDD	WB	3	1	0.000030	0.000060	0.000032	0.000025
Fifteen Mile Creek	Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.000020	0.000030	0.000012	0.0000029
Fifteen Mile Creek	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000020	0.000030	0.000012	0.0000029
Fifteen Mile Creek	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	3	0.00021	0.00025	0.00022	0.000023
Fifteen Mile Creek	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	1	0.000020	0.000070	0.000030	0.000035
Fifteen Mile Creek	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00024	0.00028	0.00026	0.000021
Fifteen Mile Creek	Dioxin/furans	OCDD	WB	3	3	0.00053	0.00099	0.00072	0.00024
Fifteen Mile Creek	Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.0029	0.0032	0.0030	0.00015
Fifteen Mile Creek	Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.00041	0.00047	0.00044	0.000031
Fifteen Mile Creek	Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	1	0.000040	0.00016	0.000083	0.000071
Fifteen Mile Creek	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	3	0.00014	0.00019	0.00016	0.000025
Fifteen Mile Creek	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	3	0.00014	0.00016	0.00015	0.000012
Fifteen Mile Creek	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000020	0.000070	0.000020	0.000013
Fifteen Mile Creek	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00010	0.00015	0.00012	0.000029
Fifteen Mile Creek	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	3	0.000070	0.00010	0.000087	0.000015
Fifteen Mile Creek	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	1	0.000010	0.000030	0.000015	0.000013
Fifteen Mile Creek	Dioxin/furans	OCDF	WB	3	3	0.000070	0.000090	0.000083	0.000012
Fifteen Mile Creek	Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	960	4,500	1,100	1,000
Fifteen Mile Creek	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	960	4,500	1,100	1,000
Fifteen Mile Creek	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	960	4,500	1,100	1,000
Fifteen Mile Creek	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	960	4,500	1,100	1,000
Fifteen Mile Creek	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	960	4,500	1,100	1,000
Fifteen Mile Creek	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	380	1,800	430	400
Fifteen Mile Creek	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	960	4,500	1,100	1,000
Fifteen Mile Creek	Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	380	1,800	430	400
Fifteen Mile Creek	Guaiacols/Phenols	2-Chlorophenol	WB	3	0	380	1,800	430	400
Fifteen Mile Creek	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	380	1,800	430	400
Fifteen Mile Creek	Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	380	1,800	430	400
Fifteen Mile Creek	Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	960	4,500	1,100	1,000
Fifteen Mile Creek	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	380	1,800	430	400
Fifteen Mile Creek	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	380	1,800	430	400
Fifteen Mile Creek	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	380	1,800	430	400
Fifteen Mile Creek	Guaiacols/Phenols	Pentachlorophenol	WB	3	0	380	1,800	430	400
Fifteen Mile Creek	Guaiacols/Phenols	Phenol	WB	3	0	380	1,800	430	400
Fifteen Mile Creek	Metals	Aluminum	WB	3	1	1,000	2,200	1,100	980
Fifteen Mile Creek	Metals	Antimony	WB	3	0	50	50	25	0.00
Fifteen Mile Creek	Metals	Arsenic	WB	3	3	150	170	160	10
Fifteen Mile Creek	Metals	Barium	WB	3	0	200	200	100	0.00
Fifteen Mile Creek	Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Fifteen Mile Creek	Metals	Cadmium	WB	3	3	56	75	66	9.5
Fifteen Mile Creek	Metals	Chromium	WB	3	2	100	150	110	51
Fifteen Mile Creek	Metals	Cobalt	WB	3	3	16	110	75	52
Fifteen Mile Creek	Metals	Copper	WB	3	3	4,500	5,400	5,000	470
Fifteen Mile Creek	Metals	Lead	WB	3	3	15	69	39	28
Fifteen Mile Creek	Metals	Manganese	WB	3	3	250	260	250	5.5
Fifteen Mile Creek	Metals	Mercury	WB	3	3	94	260	180	81
Fifteen Mile Creek	Metals	Nickel	WB	3	3	74	570	280	250
Fifteen Mile Creek	Metals	Selenium	WB	3	3	520	570	550	25
Fifteen Mile Creek	Metals	Silver	WB	3	0	100	100	50	0.00
Fifteen Mile Creek	Metals	Thallium	WB	3	0	50	50	25	0.00
Fifteen Mile Creek	Metals	Vanadium	WB	3	3	42	45	43	1.5
Fifteen Mile Creek	Metals	Zinc	WB	3	3	22,000	22,000	22,000	470
Fifteen Mile Creek	PCBs	Aroclor 1016	WB	3	0	19	20	9.8	0.29
Fifteen Mile Creek	PCBs	Aroclor 1221	WB	3	0	19	20	9.8	0.29
Fifteen Mile Creek	PCBs	Aroclor 1232	WB	3	0	19	20	9.8	0.29
Fifteen Mile Creek	PCBs	Aroclor 1242	WB	3	0	19	20	9.8	0.29
Fifteen Mile Creek	PCBs	Aroclor 1248	WB	3	0	19	20	9.8	0.29
Fifteen Mile Creek	PCBs	Aroclor 1254	WB	3	3	100	150	130	26
Fifteen Mile Creek	PCBs	Aroclor 1260	WB	3	0	19	20	9.8	0.29
Fifteen Mile Creek	PCBs	PCB 077	WB	3	3	0.031	0.037	0.034	0.0035
Fifteen Mile Creek	PCBs	PCB 105	WB	3	3	1.5	2.0	1.7	0.24
Fifteen Mile Creek	PCBs	PCB 114	WB	3	3	0.17	0.21	0.18	0.022
Fifteen Mile Creek	PCBs	PCB 118	WB	3	3	4.7	5.5	5.0	0.44
Fifteen Mile Creek	PCBs	PCB 123	WB	3	3	0.061	0.068	0.065	0.0037
Fifteen Mile Creek	PCBs	PCB 126	WB	3	3	0.023	0.029	0.025	0.0033
Fifteen Mile Creek	PCBs	PCB 156	WB	3	3	0.39	0.46	0.41	0.044
Fifteen Mile Creek	PCBs	PCB 157	WB	3	3	0.069	0.094	0.080	0.013
Fifteen Mile Creek	PCBs	PCB 167	WB	3	3	0.22	0.28	0.25	0.029
Fifteen Mile Creek	PCBs	PCB 169	WB	3	0	0.0012	0.0023	0.00093	0.00027
Fifteen Mile Creek	PCBs	PCB 170	WB	3	3	0.57	0.70	0.64	0.070
Fifteen Mile Creek	PCBs	PCB 180	WB	3	3	2.0	2.4	2.2	0.23
Fifteen Mile Creek	PCBs	PCB 189	WB	3	3	0.023	0.028	0.026	0.0027
Fifteen Mile Creek	Pesticides	Aldrin	WB	3	0	1.9	2.0	0.98	0.029
Fifteen Mile Creek	Pesticides	Alpha-BHC	WB	3	0	1.9	2.0	0.98	0.029
Fifteen Mile Creek	Pesticides	Alpha-Chlordene	WB	3	0	1.9	2.0	0.98	0.029
Fifteen Mile Creek	Pesticides	Beta-BHC	WB	3	0	1.9	2.0	0.98	0.029

Appendix D-2: Tributary Summary Statistics
Pacific Lamprey

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Fifteen Mile Creek	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	3	3.6	18	12	7.3
Fifteen Mile Creek	Pesticides	cis-Nonachlor	WB	3	3	9.7	15	13	2.8
Fifteen Mile Creek	Pesticides	DDD-o,p'	WB	3	3	4.1	4.8	4.5	0.38
Fifteen Mile Creek	Pesticides	DDE-o,p'	WB	3	2	2.0	8.5	5.6	4.0
Fifteen Mile Creek	Pesticides	DDT-o,p'	WB	3	2	2.0	3.0	2.1	1.0
Fifteen Mile Creek	Pesticides	DDD-p,p'	WB	3	3	23	25	24	1.2
Fifteen Mile Creek	Pesticides	DDE-p,p'	WB	3	3	66	77	71	5.7
Fifteen Mile Creek	Pesticides	DDT-p,p'	WB	3	3	8.3	29	16	12
Fifteen Mile Creek	Pesticides	DDMU	WB	3	3	4.4	6.9	6.0	1.4
Fifteen Mile Creek	Pesticides	Delta-BHC	WB	3	0	1.9	2.0	0.98	0.029
Fifteen Mile Creek	Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	#DIV/0!	#DIV/0!
Fifteen Mile Creek	Pesticides	Gamma-Chlordane	WB	3	3	2.4	3.1	2.8	0.36
Fifteen Mile Creek	Pesticides	Gamma-Chlordene	WB	3	0	1.9	2.0	0.98	0.029
Fifteen Mile Creek	Pesticides	Heptachlor	WB	3	0	1.9	2.0	0.98	0.029
Fifteen Mile Creek	Pesticides	Heptachlor Epoxide	WB	3	0	0.00	0.00	#DIV/0!	#DIV/0!
Fifteen Mile Creek	Pesticides	Hexachlorobenzene	WB	3	3	8.8	11	10	1.3
Fifteen Mile Creek	Pesticides	Lindane	WB	3	0	1.9	2.0	0.98	0.029
Fifteen Mile Creek	Pesticides	Mirex	WB	3	0	1.9	2.0	0.98	0.029
Fifteen Mile Creek	Pesticides	Oxychlordane	WB	3	3	4.6	5.7	5.1	0.55
Fifteen Mile Creek	Pesticides	Pentachloroanisol	WB	3	3	1.2	1.6	1.4	0.21
Fifteen Mile Creek	Pesticides	Toxaphene	WB	3	0	57	59	29	0.58
Fifteen Mile Creek	Pesticides	trans-Nonachlor	WB	3	3	18	25	22	3.8
Fifteen Mile Creek	Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	9.1	9.8	4.8	0.18
Fifteen Mile Creek	Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	9.1	9.8	4.8	0.18
Fifteen Mile Creek	Semivolatiles	2,4-Dinitrotoluene	WB	3	0	18	20	9.5	0.36
Fifteen Mile Creek	Semivolatiles	2,6-Dinitrotoluene	WB	3	0	37	39	19	0.69
Fifteen Mile Creek	Semivolatiles	2-Chloronaphthalene	WB	3	0	18	20	9.5	0.36
Fifteen Mile Creek	Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	9.1	9.8	4.8	0.18
Fifteen Mile Creek	Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	9.1	9.8	4.8	0.18
Fifteen Mile Creek	Semivolatiles	Acenaphthene	WB	3	0	18	26	11	2.0
Fifteen Mile Creek	Semivolatiles	Acenaphthylene	WB	3	0	9.1	9.8	4.8	0.18
Fifteen Mile Creek	Semivolatiles	Anthracene	WB	3	0	9.1	9.8	4.8	0.18
Fifteen Mile Creek	Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	9.1	9.8	4.8	0.18
Fifteen Mile Creek	Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	9.1	9.8	4.8	0.18
Fifteen Mile Creek	Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	9.1	9.8	4.8	0.18
Fifteen Mile Creek	Semivolatiles	Benzo(a)anthracene	WB	3	0	9.1	9.8	4.8	0.18
Fifteen Mile Creek	Semivolatiles	Benzo(a)pyrene	WB	3	0	9.1	49	11	11
Fifteen Mile Creek	Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	98	23	23
Fifteen Mile Creek	Semivolatiles	Benzo[b]fluoranthene	WB	3	0	9.1	49	11	11
Fifteen Mile Creek	Semivolatiles	Benzo[k]fluoranthene	WB	3	0	9.1	49	11	11
Fifteen Mile Creek	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	20	9.5	0.36
Fifteen Mile Creek	Semivolatiles	Chrysene	WB	3	0	9.1	9.8	4.8	0.18
Fifteen Mile Creek	Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	98	23	23
Fifteen Mile Creek	Semivolatiles	Dibenzofuran	WB	3	0	9.1	9.8	4.8	0.18
Fifteen Mile Creek	Semivolatiles	Fluoranthene	WB	3	1	17	19	12	4.3
Fifteen Mile Creek	Semivolatiles	9H-Fluorene	WB	3	0	9.1	9.8	4.8	0.18
Fifteen Mile Creek	Semivolatiles	Hexachlorobutadiene	WB	3	0	9.1	9.8	4.8	0.18
Fifteen Mile Creek	Semivolatiles	Hexachloroethane	WB	3	0	9.1	9.8	4.8	0.18
Fifteen Mile Creek	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	98	23	23
Fifteen Mile Creek	Semivolatiles	Naphthalene	WB	3	0	9.1	27	8.1	4.6
Fifteen Mile Creek	Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	9.1	9.8	4.8	0.18
Fifteen Mile Creek	Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	9.1	9.8	4.8	0.18
Fifteen Mile Creek	Semivolatiles	Nitrobenzene	WB	3	0	9.1	9.8	4.8	0.18
Fifteen Mile Creek	Semivolatiles	Phenanthrene	WB	3	1	9.1	15	8.2	6.1
Fifteen Mile Creek	Semivolatiles	Pyrene	WB	3	0	18	20	9.5	0.36
Fifteen Mile Creek	Semivolatiles	Retene	WB	3	0	18	20	9.5	0.36
Willamette River	Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000010	0.000060	0.000027	0.000029
Willamette River	Dioxin/furans	2,3,7,8-TCDD	WB	6	2	0.000020	0.000070	0.000028	0.000026
Willamette River	Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000040	0.00017	0.00011	0.000078
Willamette River	Dioxin/furans	1,2,3,7,8-PeCDD	WB	6	5	0.000030	0.00015	0.00011	0.000055
Willamette River	Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	2	0.000040	0.00011	0.000077	0.000049
Willamette River	Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	6	4	0.000010	0.00013	0.000067	0.000053
Willamette River	Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.00016	0.00021	0.00018	0.000026
Willamette River	Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	6	4	0.000020	0.00018	0.00012	0.000082
Willamette River	Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000040	0.000070	0.000047	0.000025
Willamette River	Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	6	4	0.000010	0.000060	0.000038	0.000025
Willamette River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.00010	0.00028	0.00019	0.00013
Willamette River	Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	6	6	0.00021	0.00025	0.00023	0.000017
Willamette River	Dioxin/furans	OCDD	FS	3	3	0.00030	0.00043	0.00037	0.000066
Willamette River	Dioxin/furans	OCDD	WB	6	5	0.000020	0.00040	0.00029	0.00014
Willamette River	Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.0012	0.0017	0.0014	0.00027
Willamette River	Dioxin/furans	2,3,7,8-TCDF	WB	6	6	0.0011	0.0017	0.0015	0.00021
Willamette River	Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	1	0.000020	0.00032	0.00012	0.00018
Willamette River	Dioxin/furans	1,2,3,7,8-PeCDF	WB	6	6	0.00018	0.00032	0.00026	0.000053
Willamette River	Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00010	0.00013	0.00011	0.000015
Willamette River	Dioxin/furans	2,3,4,7,8-PeCDF	WB	6	4	0.000010	0.00013	0.000087	0.000053

Appendix D-2: Tributary Summary Statistics
Pacific Lamprey

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Willamette River	Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	2	0.000010	0.00012	0.000082	0.000066
Willamette River	Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	6	5	0.000010	0.00013	0.000083	0.000043
Willamette River	Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000080	0.00010	0.000087	0.000012
Willamette River	Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	6	4	0.000010	0.00012	0.000074	0.000054
Willamette River	Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	2	0.000040	0.000060	0.000043	0.000021
Willamette River	Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	6	4	0.000020	0.000060	0.000044	0.000025
Willamette River	Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	3	0.000080	0.00020	0.00016	0.000069
Willamette River	Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	6	3	0.000010	0.00019	0.000097	0.000095
Willamette River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000010	0.000070	0.000017	0.000016
Willamette River	Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	6	2	0.000010	0.000090	0.000041	0.000039
Willamette River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000070	0.000017	0.000016
Willamette River	Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	6	2	0.000010	0.000060	0.000016	0.000092
Willamette River	Dioxin/furans	OCDF	FS	3	0	0.000020	0.00011	0.000027	0.000025
Willamette River	Dioxin/furans	OCDF	WB	6	3	0.000020	0.000090	0.000028	0.000012
Willamette River	Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	2,400	2,500	1,200	18
Willamette River	Guaiacols/Phenols	4-Chloroguaiacol	WB	6	0	500	2,500	740	410
Willamette River	Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	2,400	2,500	1,200	18
Willamette River	Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	6	0	500	2,500	740	410
Willamette River	Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	2,400	2,500	1,200	18
Willamette River	Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	6	0	500	2,500	740	410
Willamette River	Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	2,400	2,500	1,200	18
Willamette River	Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	6	0	500	2,500	740	410
Willamette River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	2,400	2,500	1,200	18
Willamette River	Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	6	0	500	2,500	740	410
Willamette River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	970	1,000	490	7.3
Willamette River	Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	6	0	200	1,000	300	160
Willamette River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	2,400	2,500	1,200	18
Willamette River	Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	6	0	500	2,500	740	410
Willamette River	Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	970	1,000	490	7.3
Willamette River	Guaiacols/Phenols	Tetrachloroguaiacol	WB	6	0	200	1,000	300	160
Willamette River	Guaiacols/Phenols	2-Chlorophenol	FS	3	0	970	1,000	490	7.3
Willamette River	Guaiacols/Phenols	2-Chlorophenol	WB	6	0	200	1,000	300	160
Willamette River	Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	970	1,000	490	7.3
Willamette River	Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	6	0	200	1,000	300	160
Willamette River	Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	970	1,000	490	7.3
Willamette River	Guaiacols/Phenols	2,4-Dichlorophenol	WB	6	0	200	1,000	300	160
Willamette River	Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	2,400	2,500	1,200	18
Willamette River	Guaiacols/Phenols	2,4-Dimethylphenol	WB	6	0	500	2,500	740	410
Willamette River	Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	970	1,000	490	7.3
Willamette River	Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	200	1,000	370	230
Willamette River	Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	970	1,000	490	7.3
Willamette River	Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	6	0	200	1,000	300	160
Willamette River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	970	1,000	490	7.3
Willamette River	Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	200	1,000	370	230
Willamette River	Guaiacols/Phenols	Pentachlorophenol	FS	3	0	970	1,000	490	7.3
Willamette River	Guaiacols/Phenols	Pentachlorophenol	WB	6	0	200	1,000	300	160
Willamette River	Guaiacols/Phenols	Phenol	FS	3	0	970	1,000	490	7.3
Willamette River	Guaiacols/Phenols	Phenol	WB	6	0	200	1,000	300	160
Willamette River	Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
Willamette River	Metals	Aluminum	WB	6	3	1,000	2,200	1,300	850
Willamette River	Metals	Antimony	FS	3	0	50	50	25	0.00
Willamette River	Metals	Antimony	WB	6	0	50	50	25	0.00
Willamette River	Metals	Arsenic	FS	3	3	280	360	310	42
Willamette River	Metals	Arsenic	WB	6	6	260	370	310	41
Willamette River	Metals	Barium	FS	3	0	200	200	100	0.00
Willamette River	Metals	Barium	WB	6	0	200	200	100	0.00
Willamette River	Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Willamette River	Metals	Beryllium	WB	6	0	4.0	4.0	2.0	0.00
Willamette River	Metals	Cadmium	FS	3	3	16	30	24	7.1
Willamette River	Metals	Cadmium	WB	6	6	120	150	140	15
Willamette River	Metals	Chromium	FS	3	1	100	140	80	52
Willamette River	Metals	Chromium	WB	6	2	100	290	98	96
Willamette River	Metals	Cobalt	FS	3	3	10	79	33	40
Willamette River	Metals	Cobalt	WB	6	6	13	390	110	150
Willamette River	Metals	Copper	FS	3	3	1,100	1,400	1,200	140
Willamette River	Metals	Copper	WB	6	6	3,700	5,500	4,300	670
Willamette River	Metals	Lead	FS	3	0	10	10	5.0	0.00
Willamette River	Metals	Lead	WB	6	0	10	10	5.0	0.00
Willamette River	Metals	Manganese	FS	3	3	370	390	380	13
Willamette River	Metals	Manganese	WB	6	6	410	540	460	46
Willamette River	Metals	Mercury	FS	3	0	110	110	54	1.7
Willamette River	Metals	Mercury	WB	6	4	91	110	86	27
Willamette River	Metals	Nickel	FS	3	0	30	30	15	0.00
Willamette River	Metals	Nickel	WB	6	1	30	31	18	6.5
Willamette River	Metals	Selenium	FS	3	3	410	450	430	20
Willamette River	Metals	Selenium	WB	6	6	530	760	600	80

Appendix D-2: Tributary Summary Statistics
Pacific Lamprey

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Willamette River	Metals	Silver	FS	3	0	100	100	50	0.00
Willamette River	Metals	Silver	WB	6	0	100	100	50	0.00
Willamette River	Metals	Thallium	FS	3	0	50	50	25	0.00
Willamette River	Metals	Thallium	WB	6	0	50	50	25	0.00
Willamette River	Metals	Vanadium	FS	3	2	10	12	9.7	4.0
Willamette River	Metals	Vanadium	WB	6	6	34	44	39	3.3
Willamette River	Metals	Zinc	FS	3	3	19,000	21,000	20,000	1,100
Willamette River	Metals	Zinc	WB	6	6	18,000	27,000	21,000	3,300
Willamette River	PCBs	Aroclor 1016	FS	3	0	19	20	9.7	0.29
Willamette River	PCBs	Aroclor 1016	WB	6	0	19	29	11	2.0
Willamette River	PCBs	Aroclor 1221	FS	3	0	19	20	9.7	0.29
Willamette River	PCBs	Aroclor 1221	WB	6	0	19	29	11	2.0
Willamette River	PCBs	Aroclor 1232	FS	3	0	19	20	9.7	0.29
Willamette River	PCBs	Aroclor 1232	WB	6	0	19	29	11	2.0
Willamette River	PCBs	Aroclor 1242	FS	3	0	19	20	9.7	0.29
Willamette River	PCBs	Aroclor 1242	WB	6	0	19	29	11	2.0
Willamette River	PCBs	Aroclor 1248	FS	3	0	19	20	9.7	0.29
Willamette River	PCBs	Aroclor 1248	WB	6	0	19	29	11	2.0
Willamette River	PCBs	Aroclor 1254	FS	3	3	80	100	87	11
Willamette River	PCBs	Aroclor 1254	WB	6	6	60	94	73	12
Willamette River	PCBs	Aroclor 1260	FS	3	0	19	20	9.7	0.29
Willamette River	PCBs	Aroclor 1260	WB	6	3	13	20	12	2.5
Willamette River	PCBs	PCB 077	FS	3	3	0.022	0.024	0.023	0.00085
Willamette River	PCBs	PCB 077	WB	6	6	0.018	0.029	0.024	0.0045
Willamette River	PCBs	PCB 105	FS	3	3	1.1	1.4	1.2	0.13
Willamette River	PCBs	PCB 105	WB	6	6	0.81	1.1	0.92	0.10
Willamette River	PCBs	PCB 114	FS	3	3	0.13	0.15	0.14	0.0075
Willamette River	PCBs	PCB 114	WB	6	6	0.10	0.14	0.12	0.016
Willamette River	PCBs	PCB 118	FS	3	3	3.4	3.8	3.6	0.21
Willamette River	PCBs	PCB 118	WB	6	6	2.4	3.3	2.8	0.39
Willamette River	PCBs	PCB 123	FS	3	3	0.047	0.070	0.058	0.012
Willamette River	PCBs	PCB 123	WB	6	6	0.033	0.048	0.040	0.0063
Willamette River	PCBs	PCB 126	FS	3	3	0.014	0.019	0.016	0.0027
Willamette River	PCBs	PCB 126	WB	6	6	0.011	0.031	0.020	0.0090
Willamette River	PCBs	PCB 156	FS	3	3	0.26	0.30	0.27	0.022
Willamette River	PCBs	PCB 156	WB	6	6	0.20	0.31	0.27	0.045
Willamette River	PCBs	PCB 157	FS	3	3	0.045	0.057	0.051	0.0059
Willamette River	PCBs	PCB 157	WB	6	3	0.0020	0.046	0.021	0.022
Willamette River	PCBs	PCB 167	FS	3	3	0.16	0.17	0.17	0.0040
Willamette River	PCBs	PCB 167	WB	6	6	0.13	0.19	0.16	0.026
Willamette River	PCBs	PCB 169	FS	3	0	0.0010	0.0010	0.00050	0.00
Willamette River	PCBs	PCB 169	WB	6	0	0.0010	0.0100	0.0017	0.0019
Willamette River	PCBs	PCB 170	FS	3	3	0.42	0.48	0.46	0.036
Willamette River	PCBs	PCB 170	WB	6	6	0.26	0.44	0.33	0.065
Willamette River	PCBs	PCB 180	FS	3	3	1.5	1.7	1.6	0.070
Willamette River	PCBs	PCB 180	WB	6	6	0.90	1.7	1.2	0.28
Willamette River	PCBs	PCB 189	FS	3	3	0.019	0.020	0.020	0.00045
Willamette River	PCBs	PCB 189	WB	6	6	0.014	0.021	0.018	0.0032
Willamette River	Pesticides	Aldrin	FS	3	0	1.9	2.0	0.97	0.029
Willamette River	Pesticides	Aldrin	WB	6	0	1.9	3.6	1.3	0.37
Willamette River	Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.97	0.029
Willamette River	Pesticides	Alpha-BHC	WB	6	0	1.9	3.6	1.3	0.37
Willamette River	Pesticides	Alpha-Chlordane	FS	3	0	1.9	2.0	0.97	0.029
Willamette River	Pesticides	Alpha-Chlordane	WB	6	0	1.9	3.6	1.3	0.37
Willamette River	Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.97	0.029
Willamette River	Pesticides	Beta-BHC	WB	6	0	1.9	3.6	1.3	0.37
Willamette River	Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	3	7.3	11	9.2	1.9
Willamette River	Pesticides	cis-Chlordane (alpha-Chlordane)	WB	6	3	2.6	9.0	4.6	3.4
Willamette River	Pesticides	cis-Nonachlor	FS	3	3	8.5	11	9.7	1.3
Willamette River	Pesticides	cis-Nonachlor	WB	6	3	2.6	9.1	4.8	3.6
Willamette River	Pesticides	DDD-o,p'	FS	3	0	1.9	2.0	0.97	0.029
Willamette River	Pesticides	DDD-o,p'	WB	6	1	1.5	3.6	1.4	0.33
Willamette River	Pesticides	DDE-o,p'	FS	3	3	4.3	4.8	4.5	0.26
Willamette River	Pesticides	DDE-o,p'	WB	6	6	3.3	5.0	4.1	0.62
Willamette River	Pesticides	DDT-o,p'	FS	3	0	1.9	2.0	0.97	0.029
Willamette River	Pesticides	DDT-o,p'	WB	6	0	1.9	3.6	1.3	0.37
Willamette River	Pesticides	DDD-p,p'	FS	3	3	4.8	9.3	7.7	2.5
Willamette River	Pesticides	DDD-p,p'	WB	6	6	3.2	10	6.8	2.6
Willamette River	Pesticides	DDE-p,p'	FS	3	3	46	55	50	4.6
Willamette River	Pesticides	DDE-p,p'	WB	6	6	35	55	44	6.7
Willamette River	Pesticides	DDT-p,p'	FS	3	3	28	38	31	5.8
Willamette River	Pesticides	DDT-p,p'	WB	6	6	6.3	26	16	8.4
Willamette River	Pesticides	DDMU	FS	3	3	3.6	5.6	4.5	1.0
Willamette River	Pesticides	DDMU	WB	6	3	2.6	4.4	2.8	1.3
Willamette River	Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.97	0.029
Willamette River	Pesticides	Delta-BHC	WB	6	0	1.9	3.6	1.3	0.37

Appendix D-2: Tributary Summary Statistics
Pacific Lamprey

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Willamette River	Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	#DIV/0!	#DIV/0!
Willamette River	Pesticides	Endosulfan Sulfate	WB	6	0	0.00	3.6	1.6	0.26
Willamette River	Pesticides	Gamma-Chlordane	FS	3	2	1.3	2.5	1.6	0.79
Willamette River	Pesticides	Gamma-Chlordane	WB	6	1	1.5	3.6	1.4	0.33
Willamette River	Pesticides	Gamma-Chlordane	FS	3	0	1.9	2.0	0.97	0.029
Willamette River	Pesticides	Gamma-Chlordane	WB	6	0	1.9	3.6	1.3	0.37
Willamette River	Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.97	0.029
Willamette River	Pesticides	Heptachlor	WB	6	0	1.9	3.6	1.3	0.37
Willamette River	Pesticides	Heptachlor Epoxide	FS	3	0	1.9	2.0	0.97	0.029
Willamette River	Pesticides	Heptachlor Epoxide	WB	6	0	1.9	3.6	1.3	0.37
Willamette River	Pesticides	Hexachlorobenzene	FS	3	3	7.1	8.0	7.6	0.46
Willamette River	Pesticides	Hexachlorobenzene	WB	6	3	2.6	7.8	4.3	3.1
Willamette River	Pesticides	Lindane	FS	3	0	1.9	2.0	0.97	0.029
Willamette River	Pesticides	Lindane	WB	6	0	1.9	3.6	1.3	0.37
Willamette River	Pesticides	Mirex	FS	3	0	1.9	2.0	0.97	0.029
Willamette River	Pesticides	Mirex	WB	6	0	1.9	3.6	1.3	0.37
Willamette River	Pesticides	Oxychlordane	FS	3	0	1.9	2.0	0.97	0.029
Willamette River	Pesticides	Oxychlordane	WB	6	0	1.9	3.6	1.3	0.37
Willamette River	Pesticides	Pentachloroanisole	FS	3	3	1.5	1.7	1.6	0.10
Willamette River	Pesticides	Pentachloroanisole	WB	6	3	1.1	3.6	1.4	0.27
Willamette River	Pesticides	Toxaphene	FS	3	0	57	60	29	0.87
Willamette River	Pesticides	Toxaphene	WB	5	0	56	110	36	11
Willamette River	Pesticides	trans-Nonachlor	FS	3	3	21	24	22	1.5
Willamette River	Pesticides	trans-Nonachlor	WB	6	3	2.6	20	9.8	9.1
Willamette River	Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	1,2,4-Trichlorobenzene	WB	6	0	5.0	25	7.4	4.1
Willamette River	Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	1,2-Diphenylhydrazine	WB	6	0	5.0	25	7.4	4.1
Willamette River	Semivolatiles	2,4-Dinitrotoluene	FS	3	0	49	50	25	0.38
Willamette River	Semivolatiles	2,4-Dinitrotoluene	WB	6	0	10	50	15	8.2
Willamette River	Semivolatiles	2,6-Dinitrotoluene	FS	3	0	97	100	49	0.73
Willamette River	Semivolatiles	2,6-Dinitrotoluene	WB	6	0	20	100	30	16
Willamette River	Semivolatiles	2-Chloronaphthalene	FS	3	0	49	50	25	0.38
Willamette River	Semivolatiles	2-Chloronaphthalene	WB	6	0	10	50	15	8.2
Willamette River	Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	4-Bromophenyl-Phenylether	WB	6	0	5.0	25	7.4	4.1
Willamette River	Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	4-Chlorophenyl-Phenylether	WB	6	0	5.0	25	7.4	4.1
Willamette River	Semivolatiles	Acenaphthene	FS	3	0	49	50	25	0.38
Willamette River	Semivolatiles	Acenaphthene	WB	6	0	10	50	15	8.2
Willamette River	Semivolatiles	Acenaphthylene	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	Acenaphthylene	WB	6	0	5.0	25	7.4	4.1
Willamette River	Semivolatiles	Anthracene	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	Anthracene	WB	6	0	5.0	25	7.4	4.1
Willamette River	Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	Benzene, 1,2-dichloro-	WB	6	0	5.0	25	7.4	4.1
Willamette River	Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	Benzene, 1,3-dichloro-	WB	6	0	5.0	25	7.4	4.1
Willamette River	Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	Benzene, 1,4-dichloro-	WB	6	0	5.0	25	7.4	4.1
Willamette River	Semivolatiles	Benzo(a)anthracene	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	Benzo(a)anthracene	WB	6	0	5.0	25	7.4	4.1
Willamette River	Semivolatiles	Benzo(a)pyrene	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	Benzo(a)pyrene	WB	6	0	5.0	25	7.4	4.1
Willamette River	Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	49	50	25	0.38
Willamette River	Semivolatiles	Benzo(g,h,i)perylene	WB	6	0	10	50	15	8.2
Willamette River	Semivolatiles	Benzo[b]fluoranthene	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	Benzo[b]fluoranthene	WB	6	0	5.0	25	7.4	4.1
Willamette River	Semivolatiles	Benzo[k]fluoranthene	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	Benzo[k]fluoranthene	WB	6	0	5.0	25	7.4	4.1
Willamette River	Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	49	50	25	0.38
Willamette River	Semivolatiles	bis(2-Chloroisopropyl)ether	WB	6	0	10	50	15	8.2
Willamette River	Semivolatiles	Chrysene	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	Chrysene	WB	6	0	5.0	25	7.4	4.1
Willamette River	Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	49	50	25	0.38
Willamette River	Semivolatiles	Dibenz[a,h]anthracene	WB	6	0	10	50	15	8.2
Willamette River	Semivolatiles	Dibenzofuran	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	Dibenzofuran	WB	6	0	5.0	25	7.4	4.1
Willamette River	Semivolatiles	Fluoranthene	FS	3	0	49	50	25	0.38
Willamette River	Semivolatiles	Fluoranthene	WB	6	0	10	50	15	8.2
Willamette River	Semivolatiles	9H-Fluorene	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	9H-Fluorene	WB	6	0	5.0	25	7.4	4.1
Willamette River	Semivolatiles	Hexachlorobutadiene	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	Hexachlorobutadiene	WB	6	0	5.0	25	7.4	4.1
Willamette River	Semivolatiles	Hexachloroethane	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	Hexachloroethane	WB	6	0	5.0	25	7.4	4.1

Appendix D-2: Tributary Summary Statistics
Pacific Lamprey

Tributary	Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Willamette River	Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	49	50	25	0.38
Willamette River	Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	6	0	10	50	15	8.2
Willamette River	Semivolatiles	Naphthalene	FS	3	0	54	85	33	8.2
Willamette River	Semivolatiles	Naphthalene	WB	6	0	23	59	20	6.2
Willamette River	Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	24	26	13	0.38
Willamette River	Semivolatiles	Naphthalene, 1-methyl-	WB	6	4	13	25	15	2.9
Willamette River	Semivolatiles	Naphthalene, 2-methyl-	FS	3	1	49	77	42	30
Willamette River	Semivolatiles	Naphthalene, 2-methyl-	WB	6	4	31	44	31	8.5
Willamette River	Semivolatiles	Nitrobenzene	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	Nitrobenzene	WB	6	0	5.0	25	7.4	4.1
Willamette River	Semivolatiles	Phenanthrene	FS	3	0	24	25	12	0.20
Willamette River	Semivolatiles	Phenanthrene	WB	6	2	7.3	25	10	4.3
Willamette River	Semivolatiles	Pyrene	FS	3	0	49	50	25	0.38
Willamette River	Semivolatiles	Pyrene	WB	6	0	10	50	15	8.2
Willamette River	Semivolatiles	Retene	FS	3	0	49	50	25	0.38
Willamette River	Semivolatiles	Retene	WB	6	0	10	50	15	8.2

Appendix D-3: Basin Summary Statistics
Bridgelip Sucker

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Dioxin/furans	2,3,7,8-TCDD	WB	3	3	0.000060	0.000080	0.000070	0.000010
Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.00018	0.00018	0.00018	2.6E-12
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	3	0.00012	0.00013	0.00012	0.0000058
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	3	0.00014	0.00017	0.00015	0.000017
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	3	0.000050	0.000060	0.000053	0.0000058
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00036	0.00042	0.00040	0.000032
Dioxin/furans	OCDD	WB	3	3	0.00075	0.00098	0.00089	0.00013
Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00076	0.0011	0.00096	0.00018
Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.000050	0.000060	0.000053	0.0000058
Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00011	0.00012	0.00012	0.0000058
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	3	0.000020	0.000020	0.000020	0.00
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	3	0.000030	0.000040	0.000033	0.0000058
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	3	0.000050	0.000060	0.000057	0.0000058
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00013	0.00015	0.00014	0.000010
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000010	0.00012	0.000078	0.000064
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000010	0.0000050	0.00
Dioxin/furans	OCDF	WB	3	3	0.000050	0.000080	0.000067	0.000015
Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	630	1,000	390	98
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	630	1,000	390	98
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	630	1,000	390	98
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	630	1,000	390	98
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	630	1,000	390	98
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	250	400	160	39
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	630	1,000	390	98
Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	250	400	160	39
Guaiacols/Phenols	2-Chlorophenol	WB	3	0	250	400	160	39
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	250	400	160	39
Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	250	400	160	39
Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	630	1,000	390	98
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	250	400	160	39
Guaiacols/Phenols	Pentachlorophenol	WB	3	0	250	400	160	39
Guaiacols/Phenols	Phenol	WB	3	0	250	400	160	39
Metals	Aluminum	WB	3	3	22,000	64,000	37,000	23,000
Metals	Antimony	WB	3	0	50	50	25	0.00
Metals	Arsenic	WB	3	3	260	300	280	21
Metals	Barium	WB	3	3	1,900	2,100	2,000	150
Metals	Beryllium	WB	3	2	4.0	8.0	5.3	3.1
Metals	Cadmium	WB	3	3	22	32	29	5.8
Metals	Chromium	WB	3	3	120	230	180	55
Metals	Cobalt	WB	3	3	86	120	96	17
Metals	Copper	WB	3	3	880	1,800	1,200	530
Metals	Lead	WB	3	3	37	78	54	22
Metals	Manganese	WB	3	3	17,000	20,000	18,000	1,700
Metals	Mercury	WB	3	1	40	53	32	19
Metals	Nickel	WB	3	3	270	600	400	180
Metals	Selenium	WB	3	3	280	280	280	0.00
Metals	Silver	WB	3	0	100	100	50	0.00
Metals	Thallium	WB	3	0	50	50	25	0.00
Metals	Vanadium	WB	3	3	140	270	190	66
Metals	Zinc	WB	3	3	20,000	21,000	20,000	500
PCBs	Aroclor 1016	WB	3	0	21	23	11	0.50
PCBs	Aroclor 1221	WB	3	0	21	23	11	0.50
PCBs	Aroclor 1232	WB	3	0	21	23	11	0.50
PCBs	Aroclor 1242	WB	3	0	21	23	11	0.50
PCBs	Aroclor 1248	WB	3	0	21	23	11	0.50
PCBs	Aroclor 1254	WB	3	3	18	32	25	7.0
PCBs	Aroclor 1260	WB	3	3	27	49	34	13
PCBs	PCB 77	WB	3	3	0.031	0.037	0.034	0.0028
PCBs	PCB 105	WB	3	3	0.53	0.59	0.57	0.030
PCBs	PCB 114	WB	3	3	0.043	0.050	0.047	0.0035
PCBs	PCB 118	WB	3	3	1.0	1.3	1.1	0.14
PCBs	PCB 123	WB	3	3	0.026	0.039	0.030	0.0072
PCBs	PCB 126	WB	3	1	0.0021	0.012	0.0048	0.0064
PCBs	PCB 156	WB	3	3	0.28	0.35	0.30	0.040
PCBs	PCB 157	WB	3	0	0.0044	0.0068	0.0028	0.00059
PCBs	PCB 167	WB	3	3	0.13	0.19	0.15	0.033
PCBs	PCB 169	WB	3	1	0.00073	0.0058	0.0022	0.0031
PCBs	PCB 170	WB	3	3	0.74	1.3	0.94	0.33
PCBs	PCB 180	WB	3	3	2.1	4.1	2.8	1.1
PCBs	PCB 189	WB	3	3	0.029	0.045	0.035	0.0086
Pesticides	Aldrin	WB	3	0	2.8	3.5	1.5	0.20
Pesticides	Alpha-BHC	WB	3	0	2.8	3.5	1.5	0.20
Pesticides	Alpha-Chlordane	WB	3	0	2.8	3.5	1.5	0.20
Pesticides	Beta-BHC	WB	3	0	2.8	3.5	1.5	0.20
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	2.8	3.5	1.5	0.20
Pesticides	cis-Nonachlor	WB	3	0	2.8	3.5	1.5	0.20
Pesticides	DDD-o,p'	WB	3	3	8.7	11	9.9	1.2

Appendix D-3: Basin Summary Statistics
Bridgelip Sucker

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Pesticides	DDE-o,p'	WB	3	3	5.9	7.9	6.8	1.0
Pesticides	DDT-o,p'	WB	3	0	2.8	3.5	1.5	0.20
Pesticides	DDD-p,p'	WB	3	3	52	72	65	11
Pesticides	DDE-p,p'	WB	3	3	310	560	400	140
Pesticides	DDT-p,p'	WB	3	3	37	52	46	8.1
Pesticides	DDMU	WB	3	3	10	21	16	5.5
Pesticides	Delta-BHC	WB	3	0	2.8	3.5	1.5	0.20
Pesticides	Endosulfan Sulfate	WB	3	3	3.5	5.4	4.6	1.0
Pesticides	Gamma-Chlordane	WB	3	0	2.8	3.5	1.5	0.20
Pesticides	Gamma-Chlordene	WB	3	0	2.8	3.5	1.5	0.20
Pesticides	Heptachlor	WB	3	0	2.8	3.5	1.5	0.20
Pesticides	Heptachlor Epoxide	WB	3	0	2.8	3.5	1.5	0.20
Pesticides	Hexachlorobenzene	WB	3	0	2.8	20	4.7	3.7
Pesticides	Lindane	WB	3	0	2.8	3.5	1.5	0.20
Pesticides	Mirex	WB	3	0	2.8	3.5	1.5	0.20
Pesticides	Oxychlordane	WB	3	0	2.8	3.5	1.5	0.20
Pesticides	Pentachloroanisol	WB	3	0	2.8	3.5	1.5	0.20
Pesticides	Toxaphene	WB	3	0	80	85	41	1.3
Pesticides	trans-Nonachlor	WB	3	0	2.8	3.5	1.5	0.20
Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	6.3	10	3.9	0.96
Semivolatiles	1,2-Diphenylhydrazine	WB	3	1	6.3	14	6.9	6.1
Semivolatiles	2,4-Dinitrotoluene	WB	3	0	13	20	7.9	2.0
Semivolatiles	2,6-Dinitrotoluene	WB	3	0	25	40	16	3.9
Semivolatiles	2-Chloronaphthalene	WB	3	0	13	20	7.9	2.0
Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	6.3	10	3.9	0.96
Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	6.3	10	3.9	0.96
Semivolatiles	Acenaphthene	WB	3	0	13	20	7.9	2.0
Semivolatiles	Acenaphthylene	WB	3	0	6.3	10	3.9	0.96
Semivolatiles	Anthracene	WB	3	0	6.3	10	3.9	0.96
Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	6.3	10	3.9	0.96
Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	6.3	10	3.9	0.96
Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	6.3	10	3.9	0.96
Semivolatiles	Benzo(a)anthracene	WB	3	0	6.3	10	3.9	0.96
Semivolatiles	Benzo(a)pyrene	WB	3	0	6.3	10	3.9	0.96
Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	13	20	7.9	2.0
Semivolatiles	Benzo[b]fluoranthene	WB	3	0	6.3	10	3.9	0.96
Semivolatiles	Benzo[k]fluoranthene	WB	3	0	6.3	10	3.9	0.96
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	13	20	7.9	2.0
Semivolatiles	Chrysene	WB	3	0	6.3	10	3.9	0.96
Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	13	20	7.9	2.0
Semivolatiles	Dibenzofuran	WB	3	0	6.3	10	3.9	0.96
Semivolatiles	Fluoranthene	WB	3	0	13	20	7.9	2.0
Semivolatiles	9H-Fluorene	WB	3	0	6.3	10	3.9	0.96
Semivolatiles	Hexachlorobutadiene	WB	3	0	6.3	10	3.9	0.96
Semivolatiles	Hexachloroethane	WB	3	0	6.3	10	3.9	0.96
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	13	20	7.9	2.0
Semivolatiles	Naphthalene	WB	3	0	14	29	10	3.8
Semivolatiles	Naphthalene, 1-methyl-	WB	3	1	6.3	10	5.2	2.2
Semivolatiles	Naphthalene, 2-methyl-	WB	3	3	12	20	16	4.1
Semivolatiles	Nitrobenzene	WB	3	0	6.3	10	3.9	0.96
Semivolatiles	Phenanthrene	WB	3	0	6.3	10	3.9	0.96
Semivolatiles	Pyrene	WB	3	0	13	20	7.9	2.0
Semivolatiles	Retene	WB	3	0	13	20	7.9	2.0

Appendix D-3: Basin Summary Statistics
Largescale Sucker

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Dioxin/furans	2,3,7,8-TCDD	FS	19	8	0.000010	0.000070	0.000026	0.000022
Dioxin/furans	2,3,7,8-TCDD	WB	23	15	0.000010	0.00021	0.000060	0.000054
Dioxin/furans	1,2,3,7,8-PeCDD	FS	19	12	0.000010	0.00018	0.000066	0.000062
Dioxin/furans	1,2,3,7,8-PeCDD	WB	23	19	0.000010	0.00023	0.00011	0.000068
Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	19	6	0.000010	0.00015	0.000045	0.000049
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	23	18	0.000010	0.00014	0.000067	0.000051
Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	19	11	0.000010	0.00014	0.000047	0.000038
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	23	12	0.000010	0.00021	0.000056	0.000060
Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	19	10	0.000010	0.00011	0.000031	0.000024
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	23	15	0.000010	0.000070	0.000028	0.000020
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	19	13	0.000010	0.00020	0.000086	0.000063
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	23	20	0.000010	0.00046	0.00021	0.00012
Dioxin/furans	OCDD	FS	19	15	0.000010	0.0020	0.00028	0.00043
Dioxin/furans	OCDD	WB	23	21	0.000040	0.0026	0.00072	0.00053
Dioxin/furans	2,3,7,8-TCDF	FS	19	18	0.000010	0.0015	0.00036	0.00041
Dioxin/furans	2,3,7,8-TCDF	WB	23	23	0.000080	0.0036	0.00086	0.00097
Dioxin/furans	1,2,3,7,8-PeCDF	FS	19	7	0.000010	0.000080	0.000023	0.000021
Dioxin/furans	1,2,3,7,8-PeCDF	WB	23	15	0.000010	0.000060	0.000031	0.000017
Dioxin/furans	2,3,4,7,8-PeCDF	FS	19	10	0.000010	0.00010	0.000028	0.000025
Dioxin/furans	2,3,4,7,8-PeCDF	WB	23	19	0.000020	0.00019	0.000069	0.000049
Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	19	8	0.000010	0.000080	0.000023	0.000024
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	23	13	0.000010	0.000040	0.000016	0.0000091
Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	19	7	0.000010	0.00010	0.000026	0.000027
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	23	11	0.000010	0.000040	0.000017	0.000012
Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	19	9	0.000010	0.00020	0.000050	0.000061
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	23	9	0.000010	0.000080	0.000028	0.000027
Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	19	8	0.000010	0.00023	0.000075	0.000082
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	23	13	0.000010	0.00017	0.000080	0.000071
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	19	8	0.000010	0.00019	0.000054	0.000056
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	23	16	0.000010	0.00012	0.000061	0.000040
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	19	3	0.000010	0.00019	0.000031	0.000049
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	23	1	0.000010	0.000050	0.000010	0.0000078
Dioxin/furans	OCDF	FS	19	9	0.000010	0.00030	0.000066	0.000076
Dioxin/furans	OCDF	WB	23	15	0.000010	0.00051	0.000074	0.00010
Guaiacols/Phenols	4-Chloroguaiacol	FS	19	0	440	960	330	100
Guaiacols/Phenols	4-Chloroguaiacol	WB	23	0	470	1,000	360	110
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	19	0	440	960	330	100
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	23	0	470	1,000	360	110
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	19	0	440	960	330	100
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	23	0	470	1,000	360	110
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	19	0	440	960	330	100
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	23	0	470	1,000	360	110
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	19	0	440	960	330	100
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	23	0	470	1,000	360	110
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	19	0	180	380	130	41
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	23	0	190	400	150	44
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	19	0	440	960	330	100
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	23	0	470	1,000	360	110
Guaiacols/Phenols	Tetrachloroguaiacol	FS	19	0	180	380	130	41
Guaiacols/Phenols	Tetrachloroguaiacol	WB	23	0	190	400	150	44
Guaiacols/Phenols	2-Chlorophenol	FS	19	0	180	380	130	41
Guaiacols/Phenols	2-Chlorophenol	WB	23	0	190	400	150	44
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	19	0	180	380	130	41
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	23	0	190	400	150	44
Guaiacols/Phenols	2,4-Dichlorophenol	FS	19	0	180	380	130	41
Guaiacols/Phenols	2,4-Dichlorophenol	WB	23	0	190	400	150	44
Guaiacols/Phenols	2,4-Dimethylphenol	FS	19	0	440	960	330	100
Guaiacols/Phenols	2,4-Dimethylphenol	WB	23	0	470	1,000	360	110
Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	18	0	180	380	130	42
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	14	0	190	400	170	37
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	19	0	180	380	130	41
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	23	0	190	400	150	44
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	18	0	180	380	130	42
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	14	0	190	400	170	37
Guaiacols/Phenols	Pentachlorophenol	FS	19	0	180	380	130	41
Guaiacols/Phenols	Pentachlorophenol	WB	23	0	190	400	150	44
Guaiacols/Phenols	Phenol	FS	19	0	180	380	130	41
Guaiacols/Phenols	Phenol	WB	23	0	190	400	150	44
Metals	Aluminum	FS	19	12	580	20,000	2,400	2,300
Metals	Aluminum	WB	23	20	5,000	190,000	69,000	48,000
Metals	Antimony	FS	19	0	50	50	25	0.00
Metals	Antimony	WB	23	0	50	51	25	0.10
Metals	Arsenic	FS	19	17	50	100	70	23
Metals	Arsenic	WB	23	23	74	320	160	72
Metals	Barium	FS	19	19	290	1,600	800	350
Metals	Barium	WB	23	23	870	4,700	2,300	1,100

Appendix D-3: Basin Summary Statistics
Largescale Sucker

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Metals	Beryllium	FS	19	3	4.0	6.0	2.5	1.2
Metals	Beryllium	WB	23	11	4.0	10	4.5	2.3
Metals	Cadmium	FS	19	5	4.0	24	4.8	6.2
Metals	Cadmium	WB	23	23	13	250	55	69
Metals	Chromium	FS	19	8	100	380	120	120
Metals	Chromium	WB	23	23	130	600	310	150
Metals	Cobalt	FS	19	19	17	250	65	67
Metals	Cobalt	WB	23	23	69	400	170	89
Metals	Copper	FS	19	19	430	810	550	99
Metals	Copper	WB	23	23	800	5,600	1,400	940
Metals	Lead	FS	19	16	10	140	29	37
Metals	Lead	WB	23	23	27	1,100	170	250
Metals	Manganese	FS	19	19	1,500	5,400	2,700	1,000
Metals	Manganese	WB	23	23	6,400	21,000	14,000	4,400
Metals	Mercury	FS	19	19	71	370	240	92
Metals	Mercury	WB	23	22	58	250	130	60
Metals	Nickel	FS	19	18	30	510	110	130
Metals	Nickel	WB	23	23	55	11,000	1,100	2,200
Metals	Selenium	FS	19	19	130	400	260	70
Metals	Selenium	WB	23	21	180	500	310	76
Metals	Silver	FS	19	0	100	200	53	11
Metals	Silver	WB	23	0	100	100	50	0.00
Metals	Thallium	FS	19	0	50	50	25	0.00
Metals	Thallium	WB	23	0	50	51	25	0.10
Metals	Vanadium	FS	19	9	10	22	11	5.3
Metals	Vanadium	WB	23	23	100	610	310	130
Metals	Zinc	FS	19	19	16,000	26,000	20,000	2,900
Metals	Zinc	WB	23	23	16,000	38,000	23,000	5,500
PCBs	Aroclor 1016	FS	19	0	18	21	9.7	0.45
PCBs	Aroclor 1016	WB	23	0	17	22	9.7	0.58
PCBs	Aroclor 1221	FS	19	0	18	21	9.7	0.45
PCBs	Aroclor 1221	WB	23	0	17	22	9.7	0.58
PCBs	Aroclor 1232	FS	19	0	18	21	9.7	0.45
PCBs	Aroclor 1232	WB	23	0	17	22	9.7	0.58
PCBs	Aroclor 1242	FS	19	0	18	21	9.7	0.45
PCBs	Aroclor 1242	WB	23	0	17	22	9.7	0.58
PCBs	Aroclor 1248	FS	19	0	18	21	9.7	0.45
PCBs	Aroclor 1248	WB	23	0	17	22	9.7	0.58
PCBs	Aroclor 1254	FS	19	10	10	46	17	11
PCBs	Aroclor 1254	WB	23	17	14	65	30	16
PCBs	Aroclor 1260	FS	19	10	11	75	25	21
PCBs	Aroclor 1260	WB	23	16	12	100	38	35
PCBs	PCB 77	FS	19	19	0.0037	0.042	0.018	0.011
PCBs	PCB 77	WB	23	23	0.0043	0.11	0.038	0.021
PCBs	PCB 105	FS	19	19	0.15	3.0	0.70	0.79
PCBs	PCB 105	WB	23	23	0.19	6.5	1.2	1.4
PCBs	PCB 114	FS	19	19	0.012	0.28	0.060	0.072
PCBs	PCB 114	WB	23	23	0.018	0.54	0.10	0.12
PCBs	PCB 118	FS	19	19	0.36	6.6	1.6	1.7
PCBs	PCB 118	WB	23	23	0.50	14	2.7	3.0
PCBs	PCB 123	FS	19	19	0.0055	0.13	0.028	0.033
PCBs	PCB 123	WB	23	23	0.0079	0.25	0.048	0.052
PCBs	PCB 126	FS	19	8	0.00063	0.013	0.0025	0.0033
PCBs	PCB 126	WB	23	9	0.00026	0.021	0.0042	0.0056
PCBs	PCB 156	FS	19	19	0.085	1.4	0.36	0.36
PCBs	PCB 156	WB	23	23	0.12	2.7	0.60	0.57
PCBs	PCB 157	FS	19	15	0.0011	0.27	0.055	0.076
PCBs	PCB 157	WB	23	17	0.00087	0.53	0.095	0.12
PCBs	PCB 167	FS	19	19	0.039	0.60	0.16	0.16
PCBs	PCB 167	WB	23	23	0.052	1.2	0.27	0.25
PCBs	PCB 169	FS	19	1	0.00050	0.089	0.0054	0.020
PCBs	PCB 169	WB	23	0	0.00080	0.021	0.0014	0.0020
PCBs	PCB 170	FS	19	19	0.13	2.5	0.76	0.78
PCBs	PCB 170	WB	23	23	0.18	5.2	1.2	1.3
PCBs	PCB 180	FS	19	19	0.37	8.6	2.5	2.7
PCBs	PCB 180	WB	23	23	0.59	17	3.7	3.9
PCBs	PCB 189	FS	19	19	0.0049	0.11	0.036	0.037
PCBs	PCB 189	WB	23	23	0.0080	0.20	0.054	0.053
Pesticides	Aldrin	FS	19	0	1.9	2.6	1.1	0.11
Pesticides	Aldrin	WB	23	0	1.7	5.0	1.1	0.34
Pesticides	Alpha-BHC	FS	19	0	1.9	2.6	1.1	0.11
Pesticides	Alpha-BHC	WB	23	0	1.7	5.0	1.1	0.34
Pesticides	Alpha-Chlordene	FS	19	0	1.9	2.6	1.1	0.11
Pesticides	Alpha-Chlordene	WB	23	0	1.7	5.0	1.1	0.34
Pesticides	Beta-BHC	FS	19	0	1.9	2.6	1.1	0.11
Pesticides	Beta-BHC	WB	23	0	1.7	5.0	1.1	0.34

Appendix D-3: Basin Summary Statistics
Largescale Sucker

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Pesticides	cis-Chlordane (alpha-Chlordane)	FS	19	2	1.2	2.6	1.1	0.12
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	23	2	0.93	5.0	1.1	0.34
Pesticides	cis-Nonachlor	FS	19	0	1.9	2.6	1.1	0.11
Pesticides	cis-Nonachlor	WB	23	4	1.7	17	2.3	3.7
Pesticides	DDD-o,p'	FS	19	8	1.5	12	2.7	2.8
Pesticides	DDD-o,p'	WB	23	15	1.7	16	5.1	4.7
Pesticides	DDE-o,p'	FS	19	8	1.2	5.0	2.1	1.4
Pesticides	DDE-o,p'	WB	23	18	1.2	12	4.2	2.7
Pesticides	DDT-o,p'	FS	19	4	1.9	12	2.5	3.1
Pesticides	DDT-o,p'	WB	23	3	1.2	17	1.9	3.3
Pesticides	DDD-p,p'	FS	19	14	1.9	91	14	22
Pesticides	DDD-p,p'	WB	23	22	1.6	140	36	42
Pesticides	DDE-p,p'	FS	19	19	14	740	200	230
Pesticides	DDE-p,p'	WB	23	23	28	1,300	370	390
Pesticides	DDT-p,p'	FS	19	16	1.5	92	20	28
Pesticides	DDT-p,p'	WB	23	22	1.1	180	33	43
Pesticides	DDMU	FS	19	8	1.9	19	4.5	5.1
Pesticides	DDMU	WB	23	13	1.7	40	8.8	10
Pesticides	Delta-BHC	FS	19	0	1.9	2.6	1.1	0.11
Pesticides	Delta-BHC	WB	23	0	1.7	5.0	1.1	0.34
Pesticides	Endosulfan Sulfate	FS	19	3		2.6	1.3	0.39
Pesticides	Endosulfan Sulfate	WB	23	2		6.5	1.5	1.3
Pesticides	Gamma-Chlordane	FS	19	0	1.9	2.6	1.1	0.11
Pesticides	Gamma-Chlordane	WB	23	2	1.4	5.0	1.2	0.35
Pesticides	Gamma-Chlordane	FS	19	0	1.9	2.6	1.1	0.11
Pesticides	Gamma-Chlordane	WB	23	0	1.7	5.0	1.1	0.34
Pesticides	Heptachlor	FS	19	0	1.9	2.6	1.1	0.11
Pesticides	Heptachlor	WB	23	0	1.7	5.0	1.1	0.34
Pesticides	Heptachlor Epoxide	FS	19	0		2.6	1.1	0.11
Pesticides	Heptachlor Epoxide	WB	23	0		5.0	1.2	0.36
Pesticides	Hexachlorobenzene	FS	19	0	1.9	2.6	1.1	0.11
Pesticides	Hexachlorobenzene	WB	23	4	1.2	5.0	1.3	0.55
Pesticides	Lindane	FS	19	0	1.9	2.6	1.1	0.11
Pesticides	Lindane	WB	23	0	1.7	5.0	1.1	0.34
Pesticides	Mirex	FS	19	1	1.3	2.6	1.1	0.12
Pesticides	Mirex	WB	23	3	0.96	5.0	1.2	0.37
Pesticides	Oxychlordane	FS	19	0	1.9	2.6	1.1	0.11
Pesticides	Oxychlordane	WB	23	1	0.97	5.0	1.1	0.34
Pesticides	Pentachloroanisol	FS	19	2	0.98	2.6	1.0	0.098
Pesticides	Pentachloroanisol	WB	23	4	0.88	5.0	1.1	0.34
Pesticides	Toxaphene	FS	19	0	54	68	30	1.6
Pesticides	Toxaphene	WB	23	0	51	81	31	4.6
Pesticides	trans-Nonachlor	FS	19	3	1.9	4.2	1.4	0.85
Pesticides	trans-Nonachlor	WB	23	9	1.2	8.3	2.1	1.9
Semivolatiles	1,2,4-Trichlorobenzene	FS	19	0	4.7	24	4.7	3.1
Semivolatiles	1,2,4-Trichlorobenzene	WB	23	0	4.7	26	5.0	3.2
Semivolatiles	1,2-Diphenylhydrazine	FS	19	0	4.7	24	4.7	3.1
Semivolatiles	1,2-Diphenylhydrazine	WB	23	1	4.7	120	12	26
Semivolatiles	2,4-Dinitrotoluene	FS	19	0	9.4	47	9.4	6.2
Semivolatiles	2,4-Dinitrotoluene	WB	23	0	9.3	53	9.9	6.4
Semivolatiles	2,6-Dinitrotoluene	FS	19	0	19	95	19	12
Semivolatiles	2,6-Dinitrotoluene	WB	23	0	19	110	20	13
Semivolatiles	2-Chloronaphthalene	FS	19	0	9.4	47	9.4	6.2
Semivolatiles	2-Chloronaphthalene	WB	23	0	4.8	53	9.6	6.7
Semivolatiles	4-Bromophenyl-Phenylether	FS	19	0	4.7	24	4.7	3.1
Semivolatiles	4-Bromophenyl-Phenylether	WB	23	0	4.7	95	6.9	9.4
Semivolatiles	4-Chlorophenyl-Phenylether	FS	19	0	4.7	24	4.7	3.1
Semivolatiles	4-Chlorophenyl-Phenylether	WB	23	0	4.7	26	5.0	3.2
Semivolatiles	Acenaphthene	FS	19	0	9.4	47	9.4	6.2
Semivolatiles	Acenaphthene	WB	23	1	9.3	53	11	8.5
Semivolatiles	Acenaphthylene	FS	19	0	4.7	24	4.7	3.1
Semivolatiles	Acenaphthylene	WB	23	2	2.8	26	5.2	3.2
Semivolatiles	Anthracene	FS	19	0	4.7	24	4.7	3.1
Semivolatiles	Anthracene	WB	23	0	4.7	95	6.9	9.4
Semivolatiles	Benzene, 1,2-dichloro-	FS	19	0	4.7	24	4.7	3.1
Semivolatiles	Benzene, 1,2-dichloro-	WB	23	0	4.7	26	5.0	3.2
Semivolatiles	Benzene, 1,3-dichloro-	FS	19	0	4.7	24	4.7	3.1
Semivolatiles	Benzene, 1,3-dichloro-	WB	23	0	4.7	26	5.0	3.2
Semivolatiles	Benzene, 1,4-dichloro-	FS	19	0	4.7	24	4.7	3.1
Semivolatiles	Benzene, 1,4-dichloro-	WB	23	0	4.7	26	5.0	3.2
Semivolatiles	Benzo(a)anthracene	FS	19	1	4.7	24	4.8	3.2
Semivolatiles	Benzo(a)anthracene	WB	23	0	4.7	99	9.0	13
Semivolatiles	Benzo(a)pyrene	FS	19	1	4.7	24	4.8	3.1
Semivolatiles	Benzo(a)pyrene	WB	23	0	4.7	99	11	15
Semivolatiles	Benzo(g,h,i)perylene	FS	19	1	9.4	47	10	6.7
Semivolatiles	Benzo(g,h,i)perylene	WB	23	0	9.3	200	22	30

Appendix D-3: Basin Summary Statistics
Largescale Sucker

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Semivolatiles	Benzo[b]Fluoranthene	FS	19	1	4.7	24	5.2	3.9
Semivolatiles	Benzo[b]Fluoranthene	WB	23	0	4.7	200	17	32
Semivolatiles	Benzo[k]fluoranthene	FS	19	1	4.7	24	5.0	3.3
Semivolatiles	Benzo[k]fluoranthene	WB	23	0	4.7	200	17	32
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	19	0		47	9.7	6.3
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	23	0	9.3	53	9.9	6.4
Semivolatiles	Chrysene	FS	19	1	4.7	24	5.0	3.3
Semivolatiles	Chrysene	WB	23	0	4.7	99	9.0	13
Semivolatiles	Dibenz[a,h]anthracene	FS	19	1	9.4	47	10	6.9
Semivolatiles	Dibenz[a,h]anthracene	WB	23	0	9.3	200	22	30
Semivolatiles	Dibenzofuran	FS	19	0	4.7	24	4.7	3.1
Semivolatiles	Dibenzofuran	WB	23	0	4.7	26	5.0	3.2
Semivolatiles	Fluoranthene	FS	19	0	9.4	47	9.4	6.2
Semivolatiles	Fluoranthene	WB	23	0	9.3	190	14	19
Semivolatiles	9H-Fluorene	FS	19	0	4.7	24	4.7	3.1
Semivolatiles	9H-Fluorene	WB	23	1	4.7	26	5.2	3.3
Semivolatiles	Hexachlorobutadiene	FS	19	0	4.7	24	4.7	3.1
Semivolatiles	Hexachlorobutadiene	WB	23	0	4.7	26	5.0	3.2
Semivolatiles	Hexachloroethane	FS	19	0	4.7	24	4.7	3.1
Semivolatiles	Hexachloroethane	WB	23	0	4.7	130	7.6	13
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	19	1	9.4	47	10	7.1
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	23	0	9.3	200	22	30
Semivolatiles	Naphthalene	FS	19	0	5.4	28	7.5	3.3
Semivolatiles	Naphthalene	WB	23	1	6.2	67	12	12
Semivolatiles	Naphthalene, 1-methyl-	FS	19	0	4.7	24	4.7	3.1
Semivolatiles	Naphthalene, 1-methyl-	WB	23	2	4.8	26	5.3	3.2
Semivolatiles	Naphthalene, 2-methyl-	FS	19	2	4.8	24	5.2	3.0
Semivolatiles	Naphthalene, 2-methyl-	WB	23	7	4.8	26	8.1	4.0
Semivolatiles	Nitrobenzene	FS	19	0	4.7	24	4.7	3.1
Semivolatiles	Nitrobenzene	WB	23	0	4.7	26	5.0	3.2
Semivolatiles	Phenanthrene	FS	19	0	4.7	24	4.7	3.1
Semivolatiles	Phenanthrene	WB	23	1	4.8	95	7.2	9.3
Semivolatiles	Pyrene	FS	19	0	9.4	47	9.4	6.2
Semivolatiles	Pyrene	WB	23	2	5.5	53	9.8	6.5
Semivolatiles	Retene	FS	19	0	9.4	47	9.4	6.2
Semivolatiles	Retene	WB	23	2	9.3	200	16	20

Appendix D-3: Basin Summary Statistics
Mountain Whitefish

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Dioxin/furans	2,3,7,8-TCDD	FS	12	10	0.000010	0.00021	0.00011	0.000076
Dioxin/furans	2,3,7,8-TCDD	WB	12	10	0.000010	0.00023	0.00012	0.000071
Dioxin/furans	1,2,3,7,8-PeCDD	FS	12	11	0.000020	0.00023	0.00017	0.000055
Dioxin/furans	1,2,3,7,8-PeCDD	WB	12	9	0.000020	0.00027	0.00016	0.000091
Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	12	9	0.000010	0.00013	0.000065	0.000045
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	12	9	0.000010	0.00015	0.000082	0.000051
Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	12	12	0.00010	0.00022	0.00014	0.000039
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	12	9	0.000010	0.00029	0.00015	0.000097
Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	12	8	0.000010	0.00011	0.000046	0.000032
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	12	8	0.000010	0.00011	0.000055	0.000033
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	12	11	0.000010	0.00038	0.00022	0.000097
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	12	12	0.00013	0.00041	0.00031	0.000079
Dioxin/furans	OCDD	FS	12	11	0.000090	0.0016	0.00038	0.00040
Dioxin/furans	OCDD	WB	12	10	0.000010	0.00076	0.00037	0.00023
Dioxin/furans	2,3,7,8-TCDF	FS	12	12	0.00014	0.014	0.0045	0.0056
Dioxin/furans	2,3,7,8-TCDF	WB	12	12	0.00023	0.012	0.0044	0.0043
Dioxin/furans	1,2,3,7,8-PeCDF	FS	12	11	0.000040	0.00014	0.000086	0.000039
Dioxin/furans	1,2,3,7,8-PeCDF	WB	12	11	0.000040	0.00026	0.00010	0.000061
Dioxin/furans	2,3,4,7,8-PeCDF	FS	12	10	0.000010	0.00035	0.00014	0.00012
Dioxin/furans	2,3,4,7,8-PeCDF	WB	12	12	0.000070	0.00036	0.00019	0.00012
Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	12	8	0.000010	0.000060	0.000028	0.000015
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	12	8	0.000010	0.000090	0.000033	0.000015
Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	12	9	0.000010	0.000060	0.000030	0.000016
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	12	8	0.000010	0.000090	0.000033	0.000015
Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	12	7	0.000010	0.00015	0.000050	0.000045
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	12	5	0.000010	0.00015	0.000039	0.000049
Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	12	7	0.000010	0.00016	0.000079	0.000067
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	12	12	0.000030	0.00017	0.000094	0.000057
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	12	5	0.000010	0.00011	0.000047	0.000038
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	12	5	0.000010	0.00013	0.000054	0.000037
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	12	3	0.000010	0.00010	0.000022	0.000019
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	12	3	0.000010	0.00013	0.000026	0.000018
Dioxin/furans	OCDF	FS	12	8	0.000010	0.00010	0.000039	0.000027
Dioxin/furans	OCDF	WB	12	5	0.000010	0.00020	0.000042	0.000054
Guaiacols/Phenols	4-Chloroguaiacol	FS	12	0	430	1,300	450	160
Guaiacols/Phenols	4-Chloroguaiacol	WB	12	0	420	990	360	120
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	12	0	430	1,300	450	160
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	12	0	420	990	360	120
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	12	0	430	1,300	450	160
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	12	0	420	990	360	120
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	12	0	430	1,300	450	160
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	12	0	420	990	360	120
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	12	0	430	1,300	450	160
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	12	0	420	990	360	120
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	12	0	170	530	180	62
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	12	0	170	400	140	48
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	12	0	430	1,300	450	160
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	12	0	420	990	360	120
Guaiacols/Phenols	Tetrachloroguaiacol	FS	12	0	170	530	180	62
Guaiacols/Phenols	Tetrachloroguaiacol	WB	12	0	170	400	140	48
Guaiacols/Phenols	2-Chlorophenol	FS	12	0	170	530	180	62
Guaiacols/Phenols	2-Chlorophenol	WB	12	0	170	400	140	48
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	12	0	170	530	180	62
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	12	0	170	400	140	48
Guaiacols/Phenols	2,4-Dichlorophenol	FS	12	0	170	530	180	62
Guaiacols/Phenols	2,4-Dichlorophenol	WB	12	0	170	400	140	48
Guaiacols/Phenols	2,4-Dimethylphenol	FS	12	0	430	1,300	450	160
Guaiacols/Phenols	2,4-Dimethylphenol	WB	12	0	420	990	360	120
Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	7	0	190	400	170	39
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	6	0	320	400	190	15
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	12	0	170	530	180	62
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	12	0	170	400	140	48
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	7	0	190	400	170	39
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	6	0	320	400	190	15
Guaiacols/Phenols	Pentachlorophenol	FS	12	0	170	530	180	62
Guaiacols/Phenols	Pentachlorophenol	WB	12	0	170	400	140	48
Guaiacols/Phenols	Phenol	FS	12	0	170	530	180	62
Guaiacols/Phenols	Phenol	WB	12	0	170	400	140	48
Metals	Aluminum	FS	12	7	510	20,000	2,600	2,800
Metals	Aluminum	WB	12	11	1,800	21,500	11,100	5,800
Metals	Antimony	FS	12	0	50	50	25	0.00
Metals	Antimony	WB	12	0	50	50	25	0.00
Metals	Arsenic	FS	12	12	51	140	100	27
Metals	Arsenic	WB	12	12	120	180	140	15
Metals	Barium	FS	12	11	200	380	280	79
Metals	Barium	WB	12	12	500	940	700	130

Appendix D-3: Basin Summary Statistics
Mountain Whitefish

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Metals	Beryllium	FS	12	0	4.0	4.0	2.0	0.00
Metals	Beryllium	WB	12	0	4.0	4.0	2.0	0.00
Metals	Cadmium	FS	12	6	4.0	14	6.5	5.0
Metals	Cadmium	WB	12	11	4.0	54	28	23
Metals	Chromium	FS	12	5	100	450	130	130
Metals	Chromium	WB	12	10	100	210	120	46
Metals	Cobalt	FS	12	12	22	93	51	26
Metals	Cobalt	WB	12	12	52	200	110	48
Metals	Copper	FS	12	12	510	840	620	100
Metals	Copper	WB	12	12	620	5,000	1,200	1,200
Metals	Lead	FS	12	9	10	26	15	7.2
Metals	Lead	WB	12	12	10	72	35	20
Metals	Manganese	FS	12	12	580	1,500	840	280
Metals	Manganese	WB	12	12	2,100	5,100	3,400	930
Metals	Mercury	FS	12	9	49	140	80	33
Metals	Mercury	WB	12	8	47	130	67	29
Metals	Nickel	FS	12	10	30	150	76	49
Metals	Nickel	WB	12	12	40	1,300	280	350
Metals	Selenium	FS	12	12	300	720	510	140
Metals	Selenium	WB	12	12	590	1,600	960	260
Metals	Silver	FS	12	0	100	100	50	0.00
Metals	Silver	WB	12	0	100	100	50	0.00
Metals	Thallium	FS	12	0	50	50	25	0.00
Metals	Thallium	WB	12	0	50	50	25	0.00
Metals	Vanadium	FS	12	10	10	50	29	14
Metals	Vanadium	WB	12	12	61	290	160	79
Metals	Zinc	FS	12	12	13,000	20,000	15,000	2,000
Metals	Zinc	WB	12	12	23,000	39,800	27,500	5,100
PCBs	Aroclor 1016	FS	12	0	16	19	9.0	0.54
PCBs	Aroclor 1016	WB	12	0	16	24	9.7	1.1
PCBs	Aroclor 1221	FS	12	0	16	19	9.0	0.54
PCBs	Aroclor 1221	WB	12	0	16	24	9.7	1.1
PCBs	Aroclor 1232	FS	12	0	16	19	9.0	0.54
PCBs	Aroclor 1232	WB	12	0	16	24	9.7	1.1
PCBs	Aroclor 1242	FS	12	3	12	25	11	5.2
PCBs	Aroclor 1242	WB	12	3	18	25	13	6.3
PCBs	Aroclor 1248	FS	12	0	16	19	9.0	0.54
PCBs	Aroclor 1248	WB	12	0	16	24	9.7	1.1
PCBs	Aroclor 1254	FS	12	9	16	930	110	260
PCBs	Aroclor 1254	WB	12	9	21	140	56	47
PCBs	Aroclor 1260	FS	12	8	8.5	190	69	68
PCBs	Aroclor 1260	WB	12	9	18	130	54	41
PCBs	PCB 77	FS	12	12	0.014	0.88	0.17	0.25
PCBs	PCB 77	WB	12	12	0.022	0.31	0.14	0.11
PCBs	PCB 105	FS	12	12	0.15	45	6.3	13
PCBs	PCB 105	WB	12	12	0.31	7.3	2.8	2.2
PCBs	PCB 114	FS	12	12	0.013	3.1	0.48	0.87
PCBs	PCB 114	WB	12	12	0.022	0.71	0.26	0.22
PCBs	PCB 118	FS	12	12	0.26	110	14	32
PCBs	PCB 118	WB	12	12	0.027	12	5.2	4.2
PCBs	PCB 123	FS	12	12	0.0075	1.5	0.21	0.42
PCBs	PCB 123	WB	12	12	0.0100	0.25	0.098	0.081
PCBs	PCB 126	FS	12	7	0.00061	0.096	0.017	0.028
PCBs	PCB 126	WB	12	7	0.00081	0.028	0.0081	0.0080
PCBs	PCB 156	FS	12	12	0.052	15	2.3	4.2
PCBs	PCB 156	WB	12	12	0.13	3.0	1.1	0.96
PCBs	PCB 157	FS	12	10	0.00073	3.0	0.45	0.82
PCBs	PCB 157	WB	12	9	0.00068	0.57	0.20	0.19
PCBs	PCB 167	FS	12	12	0.021	4.1	0.71	1.1
PCBs	PCB 167	WB	12	12	0.056	0.74	0.38	0.28
PCBs	PCB 169	FS	12	1	0.00050	0.016	0.0022	0.0022
PCBs	PCB 169	WB	12	1	0.00054	0.0052	0.0014	0.00080
PCBs	PCB 170	FS	12	12	0.23	9.8	2.5	2.9
PCBs	PCB 170	WB	12	12	0.27	3.6	1.8	1.4
PCBs	PCB 180	FS	12	12	0.67	20	6.9	6.6
PCBs	PCB 180	WB	12	12	0.70	14	5.4	4.6
PCBs	PCB 189	FS	12	12	0.0061	0.41	0.10	0.12
PCBs	PCB 189	WB	12	12	0.014	0.25	0.081	0.077
Pesticides	Aldrin	FS	12	1	1.7	6.0	1.4	1.5
Pesticides	Aldrin	WB	12	3	1.6	3.0	1.3	0.34
Pesticides	Alpha-BHC	FS	12	0	1.7	2.4	0.97	0.12
Pesticides	Alpha-BHC	WB	12	3	1.3	3.0	1.2	0.30
Pesticides	Alpha-Chlordene	FS	12	0	1.7	2.4	0.97	0.12
Pesticides	Alpha-Chlordene	WB	12	0	1.6	3.0	1.0	0.23
Pesticides	Beta-BHC	FS	12	0	1.7	2.4	0.97	0.12
Pesticides	Beta-BHC	WB	12	0	1.6	3.0	1.0	0.23

Appendix D-3: Basin Summary Statistics
Mountain Whitefish

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Pesticides	cis-Chlordane (alpha-Chlordane)	FS	12	0	1.7	2.4	0.97	0.12
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	12	0	1.6	3.0	1.0	0.23
Pesticides	cis-Nonachlor	FS	12	6	1.7	17	5.9	5.9
Pesticides	cis-Nonachlor	WB	12	6	1.8	17	6.1	5.8
Pesticides	DDD-o,p'	FS	12	6	1.7	12	4.4	4.2
Pesticides	DDD-o,p'	WB	12	6	1.8	18	6.3	6.9
Pesticides	DDE-o,p'	FS	12	7	1.7	56	9.7	15
Pesticides	DDE-o,p'	WB	12	6	1.8	19	6.3	6.8
Pesticides	DDT-o,p'	FS	12	0	1.7	2.4	0.97	0.12
Pesticides	DDT-o,p'	WB	12	0	1.6	3.0	1.0	0.23
Pesticides	DDD-p,p'	FS	12	6	1.7	96	33	36
Pesticides	DDD-p,p'	WB	12	6	1.8	110	39	43
Pesticides	DDE-p,p'	FS	12	12	8.0	910	360	370
Pesticides	DDE-p,p'	WB	12	12	13	770	340	330
Pesticides	DDT-p,p'	FS	12	9	1.7	58	16	21
Pesticides	DDT-p,p'	WB	12	9	1.8	49	13	18
Pesticides	DDMU	FS	12	6	1.7	40	14	14
Pesticides	DDMU	WB	12	6	1.8	31	14	14
Pesticides	Delta-BHC	FS	12	0	1.7	2.4	0.97	0.12
Pesticides	Delta-BHC	WB	12	0	1.6	3.0	1.0	0.23
Pesticides	Endosulfan Sulfate	FS	12	0	1.7	2.4	0.97	0.12
Pesticides	Endosulfan Sulfate	WB	12	0	1.6	3.0	1.0	0.23
Pesticides	Gamma-Chlordane	FS	12	0	1.7	2.4	0.97	0.12
Pesticides	Gamma-Chlordane	WB	12	0	1.6	3.0	1.0	0.23
Pesticides	Gamma-Chlordane	FS	12	0	1.7	2.4	0.97	0.12
Pesticides	gamma-Chlordane	WB	12	0	1.6	3.0	1.0	0.23
Pesticides	Heptachlor	FS	12	0	1.7	2.4	0.97	0.12
Pesticides	Heptachlor	WB	12	0	1.6	3.0	1.0	0.23
Pesticides	Heptachlor Epoxide	FS	12	0	1.7	2.4	0.97	0.12
Pesticides	Heptachlor Epoxide	WB	12	0	1.6	3.0	1.0	0.23
Pesticides	Hexachlorobenzene	FS	12	3	0.84	2.4	1.0	0.16
Pesticides	Hexachlorobenzene	WB	12	6	0.94	3.0	1.4	0.55
Pesticides	Lindane	FS	12	0	1.7	2.4	0.97	0.12
Pesticides	Lindane	WB	12	0	1.6	3.0	1.0	0.23
Pesticides	Mirex	FS	12	3	1.7	13	2.9	3.9
Pesticides	Mirex	WB	12	3	1.8	6.0	2.1	1.9
Pesticides	Oxychlordane	FS	12	0	1.7	2.4	0.97	0.12
Pesticides	Oxychlordane	WB	12	0	1.6	3.0	1.0	0.23
Pesticides	Pentachloroanisol	FS	12	2	1.5	2.4	1.1	0.32
Pesticides	Pentachloroanisol	WB	12	3	1.6	3.0	1.3	0.41
Pesticides	Toxaphene	FS	12	0	50	73	29	3.6
Pesticides	Toxaphene	WB	12	0	48	89	31	6.6
Pesticides	trans-Nonachlor	FS	12	5	1.7	7.4	2.4	2.2
Pesticides	trans-Nonachlor	WB	12	6	1.8	5.5	2.6	1.6
Semivolatiles	1,2,4-Trichlorobenzene	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	1,2,4-Trichlorobenzene	WB	12	0	4.2	9.9	3.6	1.2
Semivolatiles	1,2-Diphenylhydrazine	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	1,2-Diphenylhydrazine	WB	12	0	4.2	9.9	3.6	1.2
Semivolatiles	2,4-Dinitrotoluene	FS	12	0	15	49	14	6.0
Semivolatiles	2,4-Dinitrotoluene	WB	12	0	8.4	20	7.1	2.4
Semivolatiles	2,6-Dinitrotoluene	FS	12	0	31	98	27	12
Semivolatiles	2,6-Dinitrotoluene	WB	12	1	17	40	16	5.5
Semivolatiles	2-Chloronaphthalene	FS	12	0	15	46	12	4.0
Semivolatiles	2-Chloronaphthalene	WB	12	0	4.2	20	6.6	3.2
Semivolatiles	4-Bromophenyl-Phenylether	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	4-Bromophenyl-Phenylether	WB	12	0	4.2	9.9	3.6	1.2
Semivolatiles	4-Chlorophenyl-Phenylether	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	4-Chlorophenyl-Phenylether	WB	12	0	4.2	9.9	3.6	1.2
Semivolatiles	Acenaphthene	FS	12	0	15	49	14	6.0
Semivolatiles	Acenaphthene	WB	12	1	8.4	31	9.3	7.5
Semivolatiles	Acenaphthylene	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	Acenaphthylene	WB	12	0	4.2	9.9	3.6	1.2
Semivolatiles	Anthracene	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	Anthracene	WB	12	0	4.2	9.9	3.6	1.2
Semivolatiles	Benzene, 1,2-dichloro-	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	Benzene, 1,2-dichloro-	WB	12	0	4.3	9.9	3.6	1.2
Semivolatiles	Benzene, 1,3-dichloro-	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	Benzene, 1,3-dichloro-	WB	12	0	4.2	9.9	3.6	1.2
Semivolatiles	Benzene, 1,4-dichloro-	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	Benzene, 1,4-dichloro-	WB	12	0	4.2	9.9	3.6	1.2
Semivolatiles	Benzo(a)anthracene	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	Benzo(a)anthracene	WB	12	0	4.2	9.9	3.6	1.2
Semivolatiles	Benzo(a)pyrene	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	Benzo(a)pyrene	WB	12	0	4.7	96	14	19
Semivolatiles	Benzo(g,h,i)perylene	FS	12	0	15	49	14	6.0
Semivolatiles	Benzo(g,h,i)perylene	WB	12	0	9.4	190	29	38

Appendix D-3: Basin Summary Statistics
Mountain Whitefish

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Semivolatiles	Benzo[b]Fluoranthene	FS	12	0	7.7	49	8.7	7.0
Semivolatiles	Benzo[b]Fluoranthene	WB	12	0	4.7	190	26	39
Semivolatiles	Benzo[k]fluoranthene	FS	12	0	7.7	49	8.7	7.0
Semivolatiles	Benzo[k]fluoranthene	WB	12	0	4.7	190	26	39
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	12	0	15	49	14	6.0
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	12	0	8.4	20	7.1	2.4
Semivolatiles	Chrysene	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	Chrysene	WB	12	0	4.2	9.9	3.6	1.2
Semivolatiles	Dibenz[a,h]anthracene	FS	12	0	15	49	14	6.0
Semivolatiles	Dibenz[a,h]anthracene	WB	12	0	9.4	190	29	38
Semivolatiles	Dibenzofuran	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	Dibenzofuran	WB	12	0	4.2	9.9	3.6	1.2
Semivolatiles	Fluoranthene	FS	12	0	15	49	14	6.0
Semivolatiles	Fluoranthene	WB	12	0	8.4	20	7.1	2.4
Semivolatiles	9H-Fluorene	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	9H-Fluorene	WB	12	0	4.2	13	3.7	1.4
Semivolatiles	Hexachlorobutadiene	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	Hexachlorobutadiene	WB	12	0	4.2	9.9	3.6	1.2
Semivolatiles	Hexachloroethane	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	Hexachloroethane	WB	12	0	4.2	9.9	3.6	1.2
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	12	0	15	49	14	6.0
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	12	0	9.4	190	29	38
Semivolatiles	Naphthalene	FS	12	0	9.4	26	9.4	3.2
Semivolatiles	Naphthalene	WB	12	0	8.6	30	9.6	3.9
Semivolatiles	Naphthalene, 1-methyl-	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	Naphthalene, 1-methyl-	WB	12	0	4.2	9.9	3.6	1.2
Semivolatiles	Naphthalene, 2-methyl-	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	Naphthalene, 2-methyl-	WB	12	3	4.7	10	5.0	2.0
Semivolatiles	Nitrobenzene	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	Nitrobenzene	WB	12	0	4.2	9.9	3.6	1.2
Semivolatiles	Phenanthrene	FS	12	0	7.7	25	6.8	3.0
Semivolatiles	Phenanthrene	WB	12	0	4.4	9.9	3.6	1.1
Semivolatiles	Pyrene	FS	12	0	15	49	14	6.0
Semivolatiles	Pyrene	WB	12	0	8.4	20	7.1	2.4
Semivolatiles	Retene	FS	12	0	15	49	14	6.0
Semivolatiles	Retene	WB	12	1	8.4	20	8.4	4.3

Appendix D-3: Basin Summary Statistics
White Sturgeon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Dioxin/furans	2,3,7,8-TCDD	FW	16	16	0.000095	0.0014	0.00045	0.00034
Dioxin/furans	2,3,7,8-TCDD	WB	8	8	0.000060	0.0013	0.00069	0.00043
Dioxin/furans	1,2,3,7,8-PeCDD	FW	16	14	0.000010	0.00018	0.00010	0.000057
Dioxin/furans	1,2,3,7,8-PeCDD	WB	8	3	0.000010	0.00017	0.000039	0.000061
Dioxin/furans	1,2,3,4,7,8-HxCDD	FW	16	13	0.000020	0.00016	0.000088	0.000053
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	8	2	0.000010	0.00013	0.000041	0.000053
Dioxin/furans	1,2,3,6,7,8-HxCDD	FW	16	14	0.000030	0.00031	0.00016	0.000093
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	8	6	0.000010	0.00043	0.00019	0.00016
Dioxin/furans	1,2,3,7,8,9-HxCDD	FW	16	11	0.000010	0.00010	0.000049	0.000029
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	8	4	0.000010	0.000070	0.000033	0.000023
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FW	16	16	0.00015	0.00068	0.00031	0.00014
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	8	7	0.000010	0.00084	0.00044	0.00027
Dioxin/furans	OCDD	FW	16	16	0.00034	0.0019	0.00067	0.00042
Dioxin/furans	OCDD	WB	8	8	0.00060	0.0035	0.0015	0.0010
Dioxin/furans	2,3,7,8-TCDF	FW	16	16	0.0025	0.054	0.017	0.014
Dioxin/furans	2,3,7,8-TCDF	WB	8	8	0.0080	0.047	0.021	0.015
Dioxin/furans	1,2,3,7,8-PeCDF	FW	16	16	0.000080	0.00046	0.00023	0.00010
Dioxin/furans	1,2,3,7,8-PeCDF	WB	8	8	0.00012	0.00047	0.00032	0.00010
Dioxin/furans	2,3,4,7,8-PeCDF	FW	16	14	0.000015	0.00040	0.00019	0.00011
Dioxin/furans	2,3,4,7,8-PeCDF	WB	8	8	0.00013	0.00053	0.00032	0.00013
Dioxin/furans	1,2,3,4,7,8-HxCDF	FW	16	15	0.000020	0.000080	0.000046	0.000019
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	8	7	0.000010	0.00015	0.000062	0.000049
Dioxin/furans	1,2,3,6,7,8-HxCDF	FW	16	15	0.000040	0.00011	0.000063	0.000022
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	8	6	0.000020	0.00015	0.000069	0.000046
Dioxin/furans	1,2,3,7,8,9-HxCDF	FW	16	8	0.000010	0.00012	0.000048	0.000041
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	8	4	0.000010	0.000070	0.000033	0.000027
Dioxin/furans	2,3,4,6,7,8-HxCDF	FW	16	15	0.000020	0.00018	0.00010	0.000060
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	8	5	0.000010	0.00019	0.000069	0.000078
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FW	16	15	0.000070	0.00021	0.00010	0.000038
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	8	5	0.000020	0.00021	0.00011	0.000080
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FW	16	4	0.000010	0.000090	0.000022	0.000018
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	8	1	0.000010	0.00017	0.000031	0.000029
Dioxin/furans	OCDF	FW	16	10	0.000010	0.00032	0.000074	0.000091
Dioxin/furans	OCDF	WB	8	5	0.000010	0.00095	0.00023	0.00032
Guaiacols/Phenols	4-Chloroguaiacol	FW	16	0	470	970	330	110
Guaiacols/Phenols	4-Chloroguaiacol	WB	8	0	500	1000	440	82
Guaiacols/Phenols	3,4-Dichloroguaiacol	FW	16	0	470	970	330	110
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	8	0	500	1000	440	82
Guaiacols/Phenols	4,5-Dichloroguaiacol	FW	16	0	470	970	330	110
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	8	0	500	1000	440	82
Guaiacols/Phenols	4,6-Dichloroguaiacol	FW	16	0	470	970	330	110
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	8	0	500	1000	440	82
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FW	16	0	470	970	330	110
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	8	0	500	1000	440	82
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FW	16	0	190	390	130	43
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	8	0	200	400	180	33
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FW	16	0	470	970	330	110
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	8	0	500	1000	440	82
Guaiacols/Phenols	Tetrachloroguaiacol	FW	16	0	190	390	130	43
Guaiacols/Phenols	Tetrachloroguaiacol	WB	8	0	200	400	180	33
Guaiacols/Phenols	2-Chlorophenol	FW	16	0	190	390	130	43
Guaiacols/Phenols	2-Chlorophenol	WB	8	0	200	400	180	33
Guaiacols/Phenols	4-Chloro-3-methylphenol	FW	16	0	190	390	130	43
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	8	0	200	400	180	33
Guaiacols/Phenols	2,4-Dichlorophenol	FW	16	0	190	390	130	43
Guaiacols/Phenols	2,4-Dichlorophenol	WB	8	0	200	400	180	33
Guaiacols/Phenols	2,4-Dimethylphenol	FW	16	0	470	970	330	110
Guaiacols/Phenols	2,4-Dimethylphenol	WB	8	0	500	1000	440	82
Guaiacols/Phenols	2,4,5-Trichlorophenol	FW	15	0	190	390	130	43
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	8	0	200	400	180	33
Guaiacols/Phenols	2,4,6-Trichlorophenol	FW	16	0	190	390	130	42
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	8	0	200	400	180	33
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FW	16	0	190	390	140	42
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	8	0	200	400	180	33
Guaiacols/Phenols	Pentachlorophenol	FW	16	0	190	390	130	43
Guaiacols/Phenols	Pentachlorophenol	WB	8	0	200	400	180	33
Guaiacols/Phenols	Phenol	FW	16	0	190	390	130	43
Guaiacols/Phenols	Phenol	WB	8	1	340	530	230	120
Metals	Aluminum	FW	16	1	1,000	20,000	3,800	4,000
Metals	Aluminum	WB	8	7	1,000	184000	48,100	65,700
Metals	Antimony	FW	16	0	50	50	25	0.00
Metals	Antimony	WB	8	0	50	500	53	80
Metals	Arsenic	FW	16	16	150	640	300	120
Metals	Arsenic	WB	8	7	200	660	370	170
Metals	Barium	FW	16	9	200	630	250	160
Metals	Barium	WB	8	8	960	2,800	1,900	680

Appendix D-3: Basin Summary Statistics
White Sturgeon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Metals	Beryllium	FW	16	2	4.0	7.4	2.3	0.99
Metals	Beryllium	WB	8	4	4.0	60	8.2	9.3
Metals	Cadmium	FW	16	2	4.0	5.5	2.2	0.70
Metals	Cadmium	WB	8	8	15	95	42	29
Metals	Chromium	FW	16	3	100	150	65	34
Metals	Chromium	WB	8	7	110	1,000	360	190
Metals	Cobalt	FW	16	15	1.0	150	27	40
Metals	Cobalt	WB	8	8	78	420	260	120
Metals	Copper	FW	16	14	210	410	250	83
Metals	Copper	WB	8	8	260	1,800	990	480
Metals	Lead	FW	16	5	10	29	8.2	6.5
Metals	Lead	WB	8	8	27	330	120	110
Metals	Manganese	FW	16	16	150	370	260	60
Metals	Manganese	WB	8	8	330	6,700	2,700	2,500
Metals	Mercury	FW	16	13	38	430	150	140
Metals	Mercury	WB	8	6	73	250	140	78
Metals	Nickel	FW	16	10	30	290	56	76
Metals	Nickel	WB	8	8	57	2,000	410	640
Metals	Selenium	FW	16	16	310	2,700	1,100	640
Metals	Selenium	WB	8	6	420	1,100	650	270
Metals	Silver	FW	16	0	100	200	53	13
Metals	Silver	WB	8	0	100	2,000	180	330
Metals	Thallium	FW	16	0	50	50	25	0.00
Metals	Thallium	WB	8	0	50	500	53	80
Metals	Vanadium	FW	16	6	10	20	9.2	3.6
Metals	Vanadium	WB	8	7	10	670	220	250
Metals	Zinc	FW	16	16	2,900	4,900	3,800	720
Metals	Zinc	WB	8	8	2,400	11,900	8,200	2,700
PCBs	Aroclor 1016	FW	16	0	18	20	9.5	0.40
PCBs	Aroclor 1016	WB	8	0	18	20	9.6	0.32
PCBs	Aroclor 1221	FW	16	0	18	20	9.5	0.40
PCBs	Aroclor 1221	WB	8	0	18	20	9.6	0.32
PCBs	Aroclor 1232	FW	16	0	18	20	9.5	0.40
PCBs	Aroclor 1232	WB	8	0	18	20	9.6	0.32
PCBs	Aroclor 1242	FW	16	0	18	20	9.5	0.40
PCBs	Aroclor 1242	WB	8	0	18	20	9.6	0.32
PCBs	Aroclor 1248	FW	16	0	18	20	9.5	0.40
PCBs	Aroclor 1248	WB	8	0	18	20	9.6	0.32
PCBs	Aroclor 1254	FW	16	16	10	190	56	45
PCBs	Aroclor 1254	WB	8	8	38	120	78	24
PCBs	Aroclor 1260	FW	16	15	13	200	54	46
PCBs	Aroclor 1260	WB	8	8	41	160	85	43
PCBs	PCB 77	FW	16	16	0.0011	0.061	0.016	0.015
PCBs	PCB 77	WB	8	8	0.0082	0.028	0.016	0.0061
PCBs	PCB 105	FW	16	16	0.35	9.6	2.3	2.1
PCBs	PCB 105	WB	8	8	2.0	5.6	3.6	1.4
PCBs	PCB 114	FW	16	16	0.028	0.75	0.19	0.17
PCBs	PCB 114	WB	8	8	0.16	0.47	0.28	0.12
PCBs	PCB 118	FW	16	16	0.27	14	2.8	3.2
PCBs	PCB 118	WB	8	8	2.2	7.2	4.3	1.7
PCBs	PCB 123	FW	16	16	0.0044	0.16	0.036	0.042
PCBs	PCB 123	WB	8	8	0.015	0.066	0.045	0.016
PCBs	PCB 126	FW	16	1	0.00074	0.0044	0.0011	0.00056
PCBs	PCB 126	WB	8	0	0.00050	0.0042	0.00094	0.00055
PCBs	PCB 156	FW	16	16	0.13	3.5	0.86	0.83
PCBs	PCB 156	WB	8	8	0.77	2.2	1.5	0.54
PCBs	PCB 157	FW	16	16	0.023	0.74	0.17	0.17
PCBs	PCB 157	WB	8	8	0.15	0.40	0.26	0.097
PCBs	PCB 167	FW	16	10	0.0012	0.17	0.036	0.054
PCBs	PCB 167	WB	8	8	0.015	0.13	0.044	0.036
PCBs	PCB 169	FW	16	0	0.00050	0.0040	0.00068	0.00047
PCBs	PCB 169	WB	8	1	0.0011	0.0047	0.0012	0.00071
PCBs	PCB 170	FW	16	16	0.36	6.8	1.7	1.7
PCBs	PCB 170	WB	8	8	1.5	4.4	2.7	1.1
PCBs	PCB 180	FW	16	16	1.2	23	5.4	5.4
PCBs	PCB 180	WB	8	8	4.8	16	9.4	4.1
PCBs	PCB 189	FW	16	16	0.015	0.31	0.067	0.073
PCBs	PCB 189	WB	8	8	0.060	0.16	0.11	0.040
Pesticides	Aldrin	FW	16	4	0.94	2.0	0.99	0.11
Pesticides	Aldrin	WB	8	4	0.97	2.0	1.1	0.36
Pesticides	Alpha-BHC	FW	16	0	1.8	2.0	0.95	0.040
Pesticides	Alpha-BHC	WB	8	0	1.8	2.0	0.96	0.032
Pesticides	Alpha-Chlordene	FW	16	1	1.8	2.4	1.0	0.23
Pesticides	Alpha-Chlordene	WB	8	0	1.8	2.0	0.96	0.032
Pesticides	Beta-BHC	FW	16	0	1.8	2.0	0.95	0.040
Pesticides	Beta-BHC	WB	8	0	1.8	2.0	0.96	0.032

Appendix D-3: Basin Summary Statistics
White Sturgeon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Pesticides	cis-Chlordane (alpha-Chlordane)	FW	16	10	1.8	11	3.3	3.1
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	8	7	2.0	9.2	3.8	2.5
Pesticides	cis-Nonachlor	FW	16	13	1.8	28	7.9	7.0
Pesticides	cis-Nonachlor	WB	8	8	5.1	13	9.5	2.7
Pesticides	DDD-o,p'	FW	16	16	2.2	24	9.6	6.2
Pesticides	DDD-o,p'	WB	8	8	4.9	22	13	6.1
Pesticides	DDE-o,p'	FW	16	14	1.5	20	5.4	4.6
Pesticides	DDE-o,p'	WB	8	8	5.1	12	7.4	2.5
Pesticides	DDT-o,p'	FW	16	9	1.8	6.9	2.8	2.0
Pesticides	DDT-o,p'	WB	8	2	1.8	6.3	1.9	1.9
Pesticides	DDD-p,p'	FW	16	16	16	350	82	83
Pesticides	DDD-p,p'	WB	8	8	78	200	130	44
Pesticides	DDE-p,p'	FW	16	16	100	1,400	470	300
Pesticides	DDE-p,p'	WB	8	8	400	1,100	620	230
Pesticides	DDT-p,p'	FW	16	15	1.7	31	8.3	8.4
Pesticides	DDT-p,p'	WB	8	8	3.9	38	15	12
Pesticides	DDMU	FW	16	16	2.0	46	9.8	11
Pesticides	DDMU	WB	8	6	1.9	16	7.8	5.6
Pesticides	Delta-BHC	FW	16	0	1.8	2.0	0.95	0.040
Pesticides	Delta-BHC	WB	8	0	1.8	2.0	0.96	0.032
Pesticides	Endosulfan Sulfate	FW	16	0	1.8	2.0	0.95	0.043
Pesticides	Endosulfan Sulfate	WB	8	0	1.8	2.0	0.96	0.032
Pesticides	Gamma-Chlordane	FW	16	14	1.6	8.1	3.9	2.4
Pesticides	Gamma-Chlordane	WB	8	8	1.9	17	6.9	4.8
Pesticides	Gamma-Chlordene	FW	16	0	1.8	2.0	0.95	0.040
Pesticides	Gamma-Chlordene	WB	8	0	1.8	2.0	0.96	0.032
Pesticides	Heptachlor	FW	16	0	1.8	2.0	0.95	0.040
Pesticides	Heptachlor	WB	8	0	1.8	2.0	0.96	0.032
Pesticides	Heptachlor Epoxide	FW	16	1	1.5	2.0	0.96	0.045
Pesticides	Heptachlor Epoxide	WB	8	0	1.8	2.0	0.96	0.032
Pesticides	Hexachlorobenzene	FW	16	16	1.8	13	5.5	3.6
Pesticides	Hexachlorobenzene	WB	8	7	1.8	19	9.3	6.8
Pesticides	Lindane	FW	16	0	1.8	2.0	0.95	0.040
Pesticides	Lindane	WB	8	0	1.8	2.0	0.96	0.032
Pesticides	Mirex	FW	16	0	1.8	2.0	0.95	0.040
Pesticides	Mirex	WB	8	0	1.8	2.0	0.96	0.032
Pesticides	Oxychlordane	FW	16	3	1.1	2.5	1.1	0.43
Pesticides	Oxychlordane	WB	8	4	0.95	2.5	1.3	0.56
Pesticides	Pentachloroanisol	FW	16	0	1.8	2.0	0.95	0.040
Pesticides	Pentachloroanisol	WB	8	0	1.8	2.0	0.96	0.032
Pesticides	Toxaphene	FW	16	0	53	60	28	1.1
Pesticides	Toxaphene	WB	8	0	55	60	29	0.80
Pesticides	trans-Nonachlor	FW	16	14	1.9	16	6.9	4.5
Pesticides	trans-Nonachlor	WB	8	6	1.9	18	7.5	5.6
Semivolatiles	1,2,4-Trichlorobenzene	FW	16	0	4.6	15	3.6	1.5
Semivolatiles	1,2,4-Trichlorobenzene	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	1,2-Diphenylhydrazine	FW	16	0	4.6	15	3.6	1.5
Semivolatiles	1,2-Diphenylhydrazine	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	2,4-Dinitrotoluene	FW	16	0	9.3	30	7.1	3.0
Semivolatiles	2,4-Dinitrotoluene	WB	8	0	9.2	92	15	14
Semivolatiles	2,6-Dinitrotoluene	FW	16	0	19	60	14	6.0
Semivolatiles	2,6-Dinitrotoluene	WB	8	0	18	180	30	28
Semivolatiles	2-Chloronaphthalene	FW	16	0	9.3	19	6.7	2.2
Semivolatiles	2-Chloronaphthalene	WB	8	0	9.2	92	15	14
Semivolatiles	4-Bromophenyl-Phenylether	FW	16	0	4.6	15	3.6	1.5
Semivolatiles	4-Bromophenyl-Phenylether	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	4-Chlorophenyl-Phenylether	FW	16	0	4.6	15	3.6	1.5
Semivolatiles	4-Chlorophenyl-Phenylether	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	Acenaphthene	FW	16	0	9.3	30	7.1	3.0
Semivolatiles	Acenaphthene	WB	8	0	9.2	92	15	14
Semivolatiles	Acenaphthylene	FW	16	0	4.6	15	3.6	1.5
Semivolatiles	Acenaphthylene	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	Anthracene	FW	16	0	4.6	15	3.6	1.5
Semivolatiles	Anthracene	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	Benzene, 1,2-dichloro-	FW	16	0	4.6	15	3.6	1.5
Semivolatiles	Benzene, 1,2-dichloro-	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	Benzene, 1,3-dichloro-	FW	16	0	4.6	15	3.6	1.5
Semivolatiles	Benzene, 1,3-dichloro-	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	Benzene, 1,4-dichloro-	FW	16	0	4.6	15	3.6	1.5
Semivolatiles	Benzene, 1,4-dichloro-	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	Benzo(a)anthracene	FW	16	0	4.6	25	4.2	2.7
Semivolatiles	Benzo(a)anthracene	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	Benzo(a)pyrene	FW	16	0	4.7	25	4.8	3.2
Semivolatiles	Benzo(a)pyrene	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	Benzo(g,h,i)perylene	FW	16	0	9.4	50	9.5	6.4
Semivolatiles	Benzo(g,h,i)perylene	WB	8	0	9.2	92	15	14

Appendix D-3: Basin Summary Statistics
White Sturgeon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Semivolatiles	Benzo[b]Fluoranthene	FW	16	0	4.7	28	5.2	3.9
Semivolatiles	Benzo[b]Fluoranthene	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	Benzo[k]fluoranthene	FW	16	0	4.7	28	5.2	3.9
Semivolatiles	Benzo[k]fluoranthene	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	bis(2-Chloroisopropyl)ether	FW	16	0	9.3	30	7.1	3.0
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	8	0	9.2	92	15	14
Semivolatiles	Chrysene	FW	16	0	4.6	25	4.2	2.7
Semivolatiles	Chrysene	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	Dibenz[a,h]anthracene	FW	16	0	9.4	50	9.5	6.4
Semivolatiles	Dibenz[a,h]anthracene	WB	8	0	9.2	92	15	14
Semivolatiles	Dibenzofuran	FW	16	0	4.6	15	3.6	1.5
Semivolatiles	Dibenzofuran	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	Fluoranthene	FW	16	0	9.3	30	7.1	3.0
Semivolatiles	Fluoranthene	WB	8	0	9.2	92	15	14
Semivolatiles	9H-Fluorene	FW	16	0	4.6	15	3.6	1.5
Semivolatiles	9H-Fluorene	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	Hexachlorobutadiene	FW	16	0	4.6	15	3.6	1.5
Semivolatiles	Hexachlorobutadiene	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	Hexachloroethane	FW	16	0	4.6	15	3.6	1.5
Semivolatiles	Hexachloroethane	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	Indeno(1,2,3-cd)pyrene	FW	16	0	9.4	50	9.5	6.4
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	8	0	9.2	92	15	14
Semivolatiles	Naphthalene	FW	16	0	8.6	60	11	6.1
Semivolatiles	Naphthalene	WB	8	0	8.6	46	9.0	6.8
Semivolatiles	Naphthalene, 1-methyl-	FW	16	1	4.6	15	4.0	2.2
Semivolatiles	Naphthalene, 1-methyl-	WB	8	0	4.8	46	7.6	6.9
Semivolatiles	Naphthalene, 2-methyl-	FW	16	1	4.6	25	5.2	5.5
Semivolatiles	Naphthalene, 2-methyl-	WB	8	0	8.6	46	7.9	6.7
Semivolatiles	Nitrobenzene	FW	16	0	4.6	15	3.6	1.5
Semivolatiles	Nitrobenzene	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	Phenanthrene	FW	16	0	4.6	17	3.8	1.6
Semivolatiles	Phenanthrene	WB	8	0	4.6	46	7.6	6.9
Semivolatiles	Pyrene	FW	16	0	9.3	50	8.4	5.4
Semivolatiles	Pyrene	WB	8	0	9.2	92	15	14
Semivolatiles	Retene	FW	16	0	9.3	50	8.4	5.4
Semivolatiles	Retene	WB	8	0	9.2	92	15	14

Appendix D-3: Basin Summary Statistics
Walleye

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Dioxin/furans	2,3,7,8-TCDD	FS	3	3	0.000070	0.000080	0.000077	0.000058
Dioxin/furans	2,3,7,8-TCDD	WB	3	3	0.00036	0.00042	0.00039	0.00031
Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000010	0.00012	0.000078	0.000064
Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.00019	0.00027	0.00024	0.000042
Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	3	0.000080	0.000090	0.000087	0.000058
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	3	0.000020	0.00013	0.000063	0.000059
Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.000040	0.000050	0.000047	0.000058
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	3	0.00012	0.00020	0.00016	0.000040
Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000010	0.000020	0.000015	0.000087
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	3	0.000030	0.000080	0.000057	0.000025
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000010	0.00010	0.000065	0.000052
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00011	0.00028	0.00017	0.000093
Dioxin/furans	OCDD	FS	3	2	0.000010	0.00016	0.000098	0.000082
Dioxin/furans	OCDD	WB	3	3	0.00015	0.00032	0.00021	0.000095
Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00060	0.00075	0.00067	0.000076
Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.0038	0.0055	0.0046	0.00088
Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	3	0.000030	0.000040	0.000033	0.000058
Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.00012	0.00015	0.00014	0.000015
Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.000020	0.000040	0.000030	0.000010
Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00019	0.00024	0.00021	0.000026
Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	3	0.000030	0.000040	0.000033	0.000058
Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000020	0.000030	0.000023	0.000058
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	2	0.000010	0.000050	0.000028	0.000023
Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	3	0.000050	0.000060	0.000053	0.000058
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	1	0.000010	0.00011	0.000040	0.000061
Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	3	0.00012	0.00013	0.00012	0.000058
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.000040	0.00016	0.000080	0.000069
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000010	0.000070	0.000042	0.000033
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	1	0.000020	0.00011	0.000043	0.000058
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	1	0.000020	0.000040	0.000020	0.000017
Dioxin/furans	OCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Dioxin/furans	OCDF	WB	3	1	0.000010	0.00010	0.000037	0.000055
Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	520	960	340	120
Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	510	990	410	140
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	520	960	340	120
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	510	990	410	140
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	520	960	340	120
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	510	990	410	140
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	520	960	340	120
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	510	990	410	140
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	520	960	340	120
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	510	990	410	140
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	210	380	130	50
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	200	400	160	54
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	520	960	340	120
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	510	990	410	140
Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	210	380	130	50
Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	200	400	160	54
Guaiacols/Phenols	2-Chlorophenol	FS	3	0	210	380	130	50
Guaiacols/Phenols	2-Chlorophenol	WB	3	0	200	400	160	54
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	210	380	130	50
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	200	400	160	54
Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	210	380	130	50
Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	200	400	160	54
Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	520	960	340	120
Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	510	990	410	140
Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	0	0			0.00	0.00
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	2	0	390	400	200	3.5
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	210	380	130	50
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	200	400	160	54
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	0	0			0.00	0.00
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	2	0	390	400	200	3.5
Guaiacols/Phenols	Pentachlorophenol	FS	3	0	210	380	130	50
Guaiacols/Phenols	Pentachlorophenol	WB	3	0	200	400	160	54
Guaiacols/Phenols	Phenol	FS	3	0	210	380	130	50
Guaiacols/Phenols	Phenol	WB	3	0	200	400	160	54
Metals	Aluminum	FS	3	3	2,300	2,700	2,500	200
Metals	Aluminum	WB	3	1	1,000	6,200	2,400	3,300
Metals	Antimony	FS	3	0	50	50	25	0.00
Metals	Antimony	WB	3	0	50	50	25	0.00
Metals	Arsenic	FS	3	3	290	400	360	64
Metals	Arsenic	WB	3	3	480	510	490	14
Metals	Barium	FS	3	3	230	240	240	5.8
Metals	Barium	WB	3	1	520	860	670	170
Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00

Appendix D-3: Basin Summary Statistics
Walleye

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
Metals	Cadmium	WB	3	3	7.0	7.9	7.4	0.45
Metals	Chromium	FS	3	2	100	110	90	35
Metals	Chromium	WB	3	3	100	120	110	12
Metals	Cobalt	FS	3	3	8.0	9.0	8.3	0.58
Metals	Cobalt	WB	3	3	19	80	56	33
Metals	Copper	FS	3	3	500	620	570	60
Metals	Copper	WB	3	3	730	5,700	2,500	2,800
Metals	Lead	FS	3	0	10	10	5.0	0.00
Metals	Lead	WB	3	2	10	490	190	260
Metals	Manganese	FS	3	3	350	390	370	18
Metals	Manganese	WB	3	3	900	970	950	43
Metals	Mercury	FS	3	3	160	200	180	23
Metals	Mercury	WB	3	3	120	220	180	52
Metals	Nickel	FS	3	3	250	280	260	15
Metals	Nickel	WB	3	3	130	400	260	140
Metals	Selenium	FS	3	3	380	400	390	10
Metals	Selenium	WB	3	1	410	540	470	65
Metals	Silver	FS	3	0	100	100	50	0.00
Metals	Silver	WB	3	2	100	100	50	0.00
Metals	Thallium	FS	3	1	50	68	39	25
Metals	Thallium	WB	3	0	50	50	25	0.00
Metals	Vanadium	FS	3	0	10	10	5.0	0.00
Metals	Vanadium	WB	3	3	11	20	14	4.9
Metals	Zinc	FS	3	3	8,500	9,000	8,700	280
Metals	Zinc	WB	3	3	13,000	15,000	14,000	850
PCBs	Aroclor 1016	FS	3	0	2.0	20	6.8	5.1
PCBs	Aroclor 1016	WB	3	0	18	19	9.3	0.29
PCBs	Aroclor 1221	FS	3	0	2.0	20	6.8	5.1
PCBs	Aroclor 1221	WB	3	0	18	19	9.3	0.29
PCBs	Aroclor 1232	FS	3	0	2.0	20	6.8	5.1
PCBs	Aroclor 1232	WB	3	0	18	19	9.3	0.29
PCBs	Aroclor 1242	FS	3	0	2.0	20	6.8	5.1
PCBs	Aroclor 1242	WB	3	0	18	19	9.3	0.29
PCBs	Aroclor 1248	FS	3	0	2.0	20	6.8	5.1
PCBs	Aroclor 1248	WB	3	0	18	19	9.3	0.29
PCBs	Aroclor 1254	FS	3	3	12	14	13	1.2
PCBs	Aroclor 1254	WB	3	3	54	98	74	22
PCBs	Aroclor 1260	FS	3	0	19	20	9.8	0.29
PCBs	Aroclor 1260	WB	3	3	47	61	52	7.6
PCBs	PCB 77	FS	3	3	0.012	0.014	0.014	0.0013
PCBs	PCB 77	WB	3	3	0.074	0.091	0.082	0.0084
PCBs	PCB 105	FS	3	3	0.31	0.38	0.33	0.038
PCBs	PCB 105	WB	3	3	1.2	5.3	3.1	2.1
PCBs	PCB 114	FS	3	3	0.025	0.031	0.027	0.0032
PCBs	PCB 114	WB	3	3	0.13	0.51	0.29	0.20
PCBs	PCB 118	FS	3	3	0.62	0.74	0.66	0.067
PCBs	PCB 118	WB	3	3	2.6	10	6.0	3.9
PCBs	PCB 123	FS	3	3	0.012	0.016	0.014	0.0020
PCBs	PCB 123	WB	3	3	0.051	0.23	0.12	0.095
PCBs	PCB 126	FS	3	0	0.00067	0.00070	0.00035	0.0000087
PCBs	PCB 126	WB	3	2	0.0010	0.018	0.0091	0.0087
PCBs	PCB 156	FS	3	3	0.11	0.15	0.12	0.023
PCBs	PCB 156	WB	3	3	0.80	2.3	1.4	0.79
PCBs	PCB 157	FS	3	0	0.00073	0.0014	0.00057	0.00018
PCBs	PCB 157	WB	3	2	0.0017	0.45	0.22	0.23
PCBs	PCB 167	FS	3	3	0.041	0.044	0.043	0.0017
PCBs	PCB 167	WB	3	3	0.32	0.67	0.45	0.19
PCBs	PCB 169	FS	3	0	0.00050	0.00075	0.00029	0.000072
PCBs	PCB 169	WB	3	0	0.0024	0.0049	0.0016	0.00071
PCBs	PCB 170	FS	3	3	0.16	0.29	0.22	0.065
PCBs	PCB 170	WB	3	3	0.97	2.8	1.9	0.90
PCBs	PCB 180	FS	3	3	0.47	1.0	0.73	0.27
PCBs	PCB 180	WB	3	3	2.8	6.9	4.9	2.1
PCBs	PCB 189	FS	3	3	0.0064	0.0074	0.0068	0.00053
PCBs	PCB 189	WB	3	3	0.053	0.095	0.069	0.023
Pesticides	Aldrin	FS	3	0	1.9	2.0	0.98	0.029
Pesticides	Aldrin	WB	3	0	1.8	1.9	0.93	0.029
Pesticides	Alpha-BHC	FS	3	0	2.4	2.5	1.2	0.029
Pesticides	Alpha-BHC	WB	3	0	1.8	2.4	1.0	0.16
Pesticides	Alpha-Chlordane	FS	3	0	2.4	2.5	1.2	0.029
Pesticides	Alpha-Chlordane	WB	3	0	1.8	2.4	1.0	0.16
Pesticides	Beta-BHC	FS	3	0	2.4	2.5	1.2	0.029
Pesticides	Beta-BHC	WB	3	0	1.8	2.4	1.0	0.16
Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	2.4	2.5	1.2	0.029

Appendix D-3: Basin Summary Statistics
Walleye

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	3	3.5	5.8	4.3	1.3
Pesticides	cis-Nonachlor	FS	3	0	2.4	2.5	1.2	0.029
Pesticides	cis-Nonachlor	WB	3	2	2.4	4.3	3.0	1.6
Pesticides	DDD-o,p'	FS	3	0	2.4	2.5	1.2	0.029
Pesticides	DDD-o,p'	WB	3	3	5.8	7.3	6.6	0.75
Pesticides	DDE-o,p'	FS	3	0	2.4	2.8	1.3	0.10
Pesticides	DDE-o,p'	WB	3	3	6.8	12	8.9	2.7
Pesticides	DDT-o,p'	FS	3	0	2.4	2.5	1.2	0.029
Pesticides	DDT-o,p'	WB	3	0	1.8	2.4	1.0	0.16
Pesticides	DDD-p,p'	FS	3	3	6.3	7.1	6.7	0.40
Pesticides	DDD-p,p'	WB	3	3	50	57	53	3.8
Pesticides	DDE-p,p'	FS	3	3	44	52	47	4.4
Pesticides	DDE-p,p'	WB	3	3	350	440	410	52
Pesticides	DDT-p,p'	FS	3	2	2.0	2.7	2.0	0.73
Pesticides	DDT-p,p'	WB	3	3	6.6	12	9.2	2.7
Pesticides	DDMU	FS	0	0	0.00	0.00	0.00	0.00
Pesticides	DDMU	WB	2	2	7.9	8.3	8.1	0.28
Pesticides	Delta-BHC	FS	3	0	2.4	2.5	1.2	0.029
Pesticides	Delta-BHC	WB	3	0	1.8	2.4	1.0	0.16
Pesticides	Endosulfan Sulfate	FS	3	0	2.4	2.5	1.2	0.029
Pesticides	Endosulfan Sulfate	WB	3	0	1.8	2.4	1.0	0.16
Pesticides	Gamma-Chlordane	FS	3	0	2.4	2.5	1.2	0.029
Pesticides	Gamma-Chlordane	WB	3	3	3.6	4.3	4.0	0.35
Pesticides	Gamma-Chlordene	FS	3	0	2.4	2.5	1.2	0.029
Pesticides	Gamma-Chlordene	WB	3	0	1.8	2.4	1.0	0.16
Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.98	0.029
Pesticides	Heptachlor	WB	3	0	1.8	1.9	0.93	0.029
Pesticides	Heptachlor Epoxide	FS	3	0	2.4	2.5	1.2	0.029
Pesticides	Heptachlor Epoxide	WB	3	0	1.8	2.4	1.0	0.16
Pesticides	Hexachlorobenzene	FS	3	0	2.4	2.5	1.2	0.029
Pesticides	Hexachlorobenzene	WB	3	2	1.9	3.8	2.3	1.3
Pesticides	Lindane	FS	3	0	2.4	2.5	1.2	0.029
Pesticides	Lindane	WB	3	0	1.8	2.4	1.0	0.16
Pesticides	Mirex	FS	3	0	2.4	2.5	1.2	0.029
Pesticides	Mirex	WB	3	2	2.4	4.1	2.8	1.5
Pesticides	Oxychlordane	FS	3	0	2.4	2.5	1.2	0.029
Pesticides	Oxychlordane	WB	3	1	1.6	2.4	1.9	0.44
Pesticides	Pentachloroanisol	FS	3	0	2.4	2.5	1.2	0.029
Pesticides	Pentachloroanisol	WB	3	0	1.2	1.9	1.0	0.16
Pesticides	Toxaphene	FS	3	0	73	74	37	0.29
Pesticides	Toxaphene	WB	3	0	55	72	31	4.8
Pesticides	trans-Nonachlor	FS	3	0	2.4	2.5	1.2	0.029
Pesticides	trans-Nonachlor	WB	3	3	3.0	8.6	6.6	3.2
Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	2,4-Dinitrotoluene	FS	3	0	10	19	6.7	2.5
Semivolatiles	2,4-Dinitrotoluene	WB	3	0	10	20	8.2	2.7
Semivolatiles	2,6-Dinitrotoluene	FS	3	0	21	38	13	5.0
Semivolatiles	2,6-Dinitrotoluene	WB	3	0	20	40	16	5.4
Semivolatiles	2-Chloronaphthalene	FS	3	0	10	19	6.7	2.5
Semivolatiles	2-Chloronaphthalene	WB	3	0	10	20	8.2	2.7
Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	Acenaphthene	FS	3	0	10	19	6.7	2.5
Semivolatiles	Acenaphthene	WB	3	0	10	20	8.2	2.7
Semivolatiles	Acenaphthylene	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	Acenaphthylene	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	Anthracene	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	Anthracene	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	Benzo(a)anthracene	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	Benzo(a)anthracene	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	Benzo(a)pyrene	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	Benzo(a)pyrene	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	10	19	6.7	2.5
Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	10	20	8.2	2.7
Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	5.2	9.6	3.4	1.3

Appendix D-3: Basin Summary Statistics
Walleye

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	Benzo[k]fluoranthene	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	Benzo[k]fluoranthene	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	10	19	6.7	2.5
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	10	20	8.2	2.7
Semivolatiles	Chrysene	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	Chrysene	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	10	19	6.7	2.5
Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	10	20	8.2	2.7
Semivolatiles	Dibenzofuran	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	Dibenzofuran	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	Fluoranthene	FS	3	0	10	19	6.7	2.5
Semivolatiles	Fluoranthene	WB	3	0	10	20	8.2	2.7
Semivolatiles	9H-Fluorene	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	9H-Fluorene	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	Hexachlorobutadiene	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	Hexachlorobutadiene	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	Hexachloroethane	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	Hexachloroethane	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	10	19	6.7	2.5
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	10	20	8.2	2.7
Semivolatiles	Naphthalene	FS	3	0	5.3	13	4.7	1.9
Semivolatiles	Naphthalene	WB	3	0	16	28	11	3.1
Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	Naphthalene, 1-methyl-	WB	3	1	7.7	9.9	5.8	1.6
Semivolatiles	Naphthalene, 2-methyl-	FS	3	2	6.0	9.6	6.1	1.4
Semivolatiles	Naphthalene, 2-methyl-	WB	3	1	9.6	16	8.6	6.4
Semivolatiles	Nitrobenzene	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	Nitrobenzene	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	Phenanthrene	FS	3	0	5.2	9.6	3.4	1.3
Semivolatiles	Phenanthrene	WB	3	0	5.0	9.9	4.1	1.4
Semivolatiles	Pyrene	FS	3	0	10	19	6.7	2.5
Semivolatiles	Pyrene	WB	3	0	10	20	8.2	2.7
Semivolatiles	Retene	FS	3	0	10	19	6.7	2.5
Semivolatiles	Retene	WB	3	0	10	20	8.2	2.7

Appendix D-3: Basin Summary Statistics
Rainbow Trout

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Dioxin/furans	2,3,7,8-TCDD	FS	7	4	0.000010	0.00015	0.000067	0.000058
Dioxin/furans	2,3,7,8-TCDD	WB	12	9	0.000010	0.00020	0.000079	0.000062
Dioxin/furans	1,2,3,7,8-PeCDD	FS	7	5	0.000010	0.00033	0.00015	0.00011
Dioxin/furans	1,2,3,7,8-PeCDD	WB	12	9	0.000040	0.00026	0.00015	0.000084
Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	7	6	0.000010	0.00027	0.00012	0.000078
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	12	9	0.000020	0.00014	0.000095	0.000045
Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	7	5	0.000020	0.00021	0.00011	0.000075
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	12	9	0.000010	0.00026	0.00011	0.000082
Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	7	6	0.000010	0.00032	0.000084	0.00011
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	12	9	0.000010	0.00010	0.000049	0.000024
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	7	7	0.00016	0.00044	0.00025	0.000099
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	12	11	0.000020	0.00032	0.00022	0.000086
Dioxin/furans	OCDD	FS	7	6	0.000090	0.0014	0.00045	0.00047
Dioxin/furans	OCDD	WB	12	12	0.00018	0.0030	0.00061	0.00076
Dioxin/furans	2,3,7,8-TCDF	FS	7	7	0.00014	0.00028	0.00022	0.000060
Dioxin/furans	2,3,7,8-TCDF	WB	12	11	0.000040	0.00048	0.00023	0.00015
Dioxin/furans	1,2,3,7,8-PeCDF	FS	7	6	0.000010	0.00018	0.000058	0.000056
Dioxin/furans	1,2,3,7,8-PeCDF	WB	12	9	0.000010	0.000090	0.000048	0.000027
Dioxin/furans	2,3,4,7,8-PeCDF	FS	7	5	0.000010	0.000070	0.000042	0.000025
Dioxin/furans	2,3,4,7,8-PeCDF	WB	12	9	0.000030	0.00012	0.000059	0.000035
Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	7	4	0.000010	0.00018	0.000039	0.000063
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	12	5	0.000010	0.00012	0.000022	0.000018
Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	7	3	0.000010	0.00021	0.000047	0.000074
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	12	9	0.000010	0.00012	0.000038	0.000016
Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	7	4	0.000010	0.00038	0.000088	0.00013
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	12	8	0.000010	0.00012	0.000057	0.000031
Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	7	7	0.00014	0.00036	0.00018	0.000081
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	12	9	0.000010	0.00021	0.00012	0.000063
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	7	6	0.000070	0.00035	0.00012	0.00011
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	12	7	0.000010	0.000090	0.000052	0.000031
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	7	1	0.000010	0.00034	0.000061	0.00012
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	12	4	0.000010	0.000090	0.000018	0.000014
Dioxin/furans	OCDF	FS	7	6	0.000030	0.00091	0.00017	0.00033
Dioxin/furans	OCDF	WB	12	6	0.000010	0.00010	0.000032	0.000022
Guaiacols/Phenols	4-Chloroguaiacol	FS	7	0	400	510	230	17
Guaiacols/Phenols	4-Chloroguaiacol	WB	12	0	420	1,200	310	120
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	7	0	400	510	230	17
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	12	0	420	1,200	310	120
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	7	0	400	510	230	17
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	12	0	420	1,200	310	120
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	7	0	400	510	230	17
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	12	0	420	1,200	310	120
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	7	0	400	510	230	17
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	12	0	420	1,200	310	120
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	7	0	160	200	94	6.8
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	12	0	170	460	120	47
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	7	0	400	510	230	17
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	12	0	420	1,200	310	120
Guaiacols/Phenols	Tetrachloroguaiacol	FS	7	0	160	200	94	6.8
Guaiacols/Phenols	Tetrachloroguaiacol	WB	12	0	170	460	120	47
Guaiacols/Phenols	2-Chlorophenol	FS	7	0	160	200	94	6.8
Guaiacols/Phenols	2-Chlorophenol	WB	12	0	170	460	120	47
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	7	0	160	200	94	6.8
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	12	0	170	460	120	47
Guaiacols/Phenols	2,4-Dichlorophenol	FS	7	0	160	200	94	6.8
Guaiacols/Phenols	2,4-Dichlorophenol	WB	12	0	170	460	120	47
Guaiacols/Phenols	2,4-Dimethylphenol	FS	7	0	400	510	230	17
Guaiacols/Phenols	2,4-Dimethylphenol	WB	12	0	420	1,200	310	120
Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	7	0	160	200	94	6.8
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	7	0	170	390	120	41
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	7	0	160	200	94	6.8
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	12	0	170	460	120	47
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	7	0	160	200	94	6.8
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	7	0	170	390	120	41
Guaiacols/Phenols	Pentachlorophenol	FS	7	0	160	200	94	6.8
Guaiacols/Phenols	Pentachlorophenol	WB	12	0	170	460	120	47
Guaiacols/Phenols	Phenol	FS	7	0	160	200	94	6.8
Guaiacols/Phenols	Phenol	WB	12	0	170	460	130	47
Metals	Aluminum	FS	7	3	1,000	5,000	1,100	720
Metals	Aluminum	WB	12	10	2,300	150,000	27,000	46,000
Metals	Antimony	FS	7	0	50	50	25	0.00
Metals	Antimony	WB	12	0	50	50	25	0.00
Metals	Arsenic	FS	7	0	50	50	25	0.00
Metals	Arsenic	WB	12	5	50	560	120	180
Metals	Barium	FS	7	5	200	720	390	270
Metals	Barium	WB	12	12	220	4,000	1,200	1,100

Appendix D-3: Basin Summary Statistics
Rainbow Trout

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Metals	Beryllium	FS	7	4	4.0	9.0	5.1	2.8
Metals	Beryllium	WB	12	1	4.0	11	3.3	2.7
Metals	Cadmium	FS	7	1	4.0	5.0	2.4	1.1
Metals	Cadmium	WB	12	7	4.0	58	12	17
Metals	Chromium	FS	7	2	100	120	70	34
Metals	Chromium	WB	12	8	100	160	93	36
Metals	Cobalt	FS	7	7	15	37	28	8.9
Metals	Cobalt	WB	12	12	48	210	88	52
Metals	Copper	FS	7	7	440	610	500	56
Metals	Copper	WB	12	12	900	5,000	1,800	1,200
Metals	Lead	FS	7	0	10	10	5.0	0.00
Metals	Lead	WB	12	10	10	88	26	26
Metals	Manganese	FS	7	7	370	600	450	84
Metals	Manganese	WB	12	12	1,100	9,700	3,200	2,500
Metals	Mercury	FS	7	7	45	150	77	33
Metals	Mercury	WB	12	9	33	380	73	100
Metals	Nickel	FS	7	7	42	76	59	11
Metals	Nickel	WB	12	12	62	1,100	330	330
Metals	Selenium	FS	7	7	180	250	220	26
Metals	Selenium	WB	12	12	230	790	360	150
Metals	Silver	FS	7	0	100	200	71	27
Metals	Silver	WB	12	0	100	100	50	0.00
Metals	Thallium	FS	7	0	50	50	25	0.00
Metals	Thallium	WB	12	0	50	50	25	0.00
Metals	Vanadium	FS	7	5	10	26	17	7.9
Metals	Vanadium	WB	12	12	49	770	190	250
Metals	Zinc	FS	7	7	8,300	19,000	12,000	4,100
Metals	Zinc	WB	12	12	23,000	39,000	29,000	5,400
PCBs	Aroclor 1016	FS	7	0	18	19	9.4	0.24
PCBs	Aroclor 1016	WB	12	0	18	22	9.7	0.62
PCBs	Aroclor 1221	FS	7	0	18	19	9.4	0.24
PCBs	Aroclor 1221	WB	12	0	18	22	9.7	0.62
PCBs	Aroclor 1232	FS	7	0	18	19	9.4	0.24
PCBs	Aroclor 1232	WB	12	0	18	22	9.7	0.62
PCBs	Aroclor 1242	FS	7	0	18	19	9.4	0.24
PCBs	Aroclor 1242	WB	12	0	18	22	9.7	0.62
PCBs	Aroclor 1248	FS	7	0	18	19	9.4	0.24
PCBs	Aroclor 1248	WB	12	0	18	22	9.7	0.62
PCBs	Aroclor 1254	FS	7	7	9.9	20	14	3.8
PCBs	Aroclor 1254	WB	12	7	6.9	30	13	6.3
PCBs	Aroclor 1260	FS	7	0	18	19	9.4	0.24
PCBs	Aroclor 1260	WB	12	1	6.0	22	9.5	1.2
PCBs	PCB 77	FS	7	7	0.0091	0.016	0.012	0.0025
PCBs	PCB 77	WB	12	12	0.0022	0.021	0.012	0.0071
PCBs	PCB 105	FS	7	7	0.40	0.65	0.49	0.089
PCBs	PCB 105	WB	12	12	0.034	0.79	0.41	0.30
PCBs	PCB 114	FS	7	7	0.032	0.050	0.038	0.0059
PCBs	PCB 114	WB	12	11	0.00028	0.061	0.032	0.024
PCBs	PCB 118	FS	7	7	0.89	1.4	1.1	0.16
PCBs	PCB 118	WB	12	12	0.063	1.7	0.89	0.66
PCBs	PCB 123	FS	7	7	0.015	0.020	0.017	0.0017
PCBs	PCB 123	WB	12	12	0.0018	0.029	0.014	0.0099
PCBs	PCB 126	FS	7	7	0.0021	0.0048	0.0033	0.0012
PCBs	PCB 126	WB	12	10	0.00048	0.0062	0.0032	0.0022
PCBs	PCB 156	FS	7	7	0.15	0.22	0.19	0.021
PCBs	PCB 156	WB	12	12	0.012	0.29	0.15	0.12
PCBs	PCB 157	FS	7	7	0.027	0.042	0.035	0.0054
PCBs	PCB 157	WB	12	8	0.00050	0.058	0.027	0.025
PCBs	PCB 167	FS	7	7	0.062	0.089	0.074	0.0084
PCBs	PCB 167	WB	12	12	0.0066	0.11	0.065	0.044
PCBs	PCB 169	FS	7	0	0.00063	0.0011	0.00041	0.000099
PCBs	PCB 169	WB	12	0	0.00050	0.0012	0.00040	0.00012
PCBs	PCB 170	FS	7	7	0.16	0.22	0.19	0.026
PCBs	PCB 170	WB	12	12	0.027	0.29	0.19	0.098
PCBs	PCB 180	FS	7	7	0.43	0.64	0.53	0.081
PCBs	PCB 180	WB	12	12	0.11	0.85	0.57	0.27
PCBs	PCB 189	FS	7	5	0.0070	0.0098	0.0067	0.0017
PCBs	PCB 189	WB	12	10	0.00050	0.012	0.0072	0.0048
Pesticides	Aldrin	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	Aldrin	WB	12	0	1.8	5.4	1.2	0.50
Pesticides	Alpha-BHC	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	Alpha-BHC	WB	12	0	1.8	5.4	1.2	0.50
Pesticides	Alpha-Chlordene	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	Alpha-Chlordene	WB	12	0	1.8	5.4	1.2	0.50
Pesticides	Beta-BHC	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	Beta-BHC	WB	12	0	1.8	5.4	1.2	0.50

Appendix D-3: Basin Summary Statistics
Rainbow Trout

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Pesticides	cis-Chlordane (alpha-Chlordane)	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	12	0	1.8	5.4	1.2	0.50
Pesticides	cis-Nonachlor	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	cis-Nonachlor	WB	12	0	1.8	5.4	1.2	0.50
Pesticides	DDD-o,p'	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	DDD-o,p'	WB	12	0	1.8	5.4	1.2	0.50
Pesticides	DDE-o,p'	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	DDE-o,p'	WB	12	3	1.6	5.4	1.6	0.99
Pesticides	DDT-o,p'	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	DDT-o,p'	WB	12	0	1.8	5.4	1.2	0.50
Pesticides	DDD-p,p'	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	DDD-p,p'	WB	12	4	1.2	5.4	1.4	0.54
Pesticides	DDE-p,p'	FS	7	7	4.1	54	22	22
Pesticides	DDE-p,p'	WB	12	12	2.9	84	29	30
Pesticides	DDT-p,p'	FS	7	6	1.9	5.1	3.1	1.2
Pesticides	DDT-p,p'	WB	12	4	1.8	12	3.5	4.3
Pesticides	DDMU	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	DDMU	WB	10	0	1.8	5.4	1.2	0.55
Pesticides	Delta-BHC	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	Delta-BHC	WB	12	0	1.8	5.4	1.2	0.50
Pesticides	Endosulfan Sulfate	FS	7	0	1.9	2.4	1.1	0.13
Pesticides	Endosulfan Sulfate	WB	12	0	1.8	5.4	1.3	0.53
Pesticides	Gamma-Chlordane	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	Gamma-Chlordane	WB	12	0	1.8	5.4	1.2	0.50
Pesticides	Gamma-Chlordene	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	Gamma-Chlordene	WB	12	0	1.8	5.4	1.2	0.50
Pesticides	Heptachlor	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	Heptachlor	WB	12	0	1.8	5.4	1.2	0.50
Pesticides	Heptachlor Epoxide	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	Heptachlor Epoxide	WB	12	0	1.8	5.4	1.3	0.53
Pesticides	Hexachlorobenzene	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	Hexachlorobenzene	WB	12	0	1.8	5.4	1.2	0.50
Pesticides	Lindane	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	Lindane	WB	12	0	1.8	5.4	1.2	0.50
Pesticides	Mirex	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	Mirex	WB	12	0	1.8	5.4	1.2	0.50
Pesticides	Oxychlordane	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	Oxychlordane	WB	12	0	1.8	18	1.9	2.3
Pesticides	Pentachloroanisol	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	Pentachloroanisol	WB	12	2	0.80	5.4	1.1	0.51
Pesticides	Toxaphene	FS	7	0	55	57	28	0.48
Pesticides	Toxaphene	WB	11	0	53	73	30	3.4
Pesticides	trans-Nonachlor	FS	7	0	1.8	2.4	1.0	0.15
Pesticides	trans-Nonachlor	WB	12	0	1.8	5.4	1.2	0.50
Semivolatiles	1,2,4-Trichlorobenzene	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	1,2,4-Trichlorobenzene	WB	12	0	4.9	27	5.5	4.2
Semivolatiles	1,2-Diphenylhydrazine	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	1,2-Diphenylhydrazine	WB	12	0	4.9	27	5.5	4.2
Semivolatiles	2,4-Dinitrotoluene	FS	7	0	7.9	10	4.7	0.35
Semivolatiles	2,4-Dinitrotoluene	WB	12	0	9.8	53	11	8.4
Semivolatiles	2,6-Dinitrotoluene	FS	7	0	16	20	9.4	0.68
Semivolatiles	2,6-Dinitrotoluene	WB	12	0	20	110	22	17
Semivolatiles	2-Chloronaphthalene	FS	7	0	7.9	10	4.7	0.35
Semivolatiles	2-Chloronaphthalene	WB	12	0	4.9	53	11	8.6
Semivolatiles	4-Bromophenyl-Phenylether	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	4-Bromophenyl-Phenylether	WB	12	0	4.9	27	5.5	4.2
Semivolatiles	4-Chlorophenyl-Phenylether	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	4-Chlorophenyl-Phenylether	WB	12	0	4.9	27	5.5	4.2
Semivolatiles	Acenaphthene	FS	7	0	7.9	10	4.7	0.35
Semivolatiles	Acenaphthene	WB	12	0	9.8	53	11	8.4
Semivolatiles	Acenaphthylene	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	Acenaphthylene	WB	12	0	4.9	27	5.5	4.2
Semivolatiles	Anthracene	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	Anthracene	WB	12	1	4.9	27	5.1	3.9
Semivolatiles	Benzene, 1,2-dichloro-	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	Benzene, 1,2-dichloro-	WB	12	0	4.9	27	5.5	4.2
Semivolatiles	Benzene, 1,3-dichloro-	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	Benzene, 1,3-dichloro-	WB	12	0	4.9	27	5.5	4.2
Semivolatiles	Benzene, 1,4-dichloro-	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	Benzene, 1,4-dichloro-	WB	12	0	4.9	27	5.5	4.2
Semivolatiles	Benzo(a)anthracene	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	Benzo(a)anthracene	WB	12	0	4.9	27	5.5	4.2
Semivolatiles	Benzo(a)pyrene	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	Benzo(a)pyrene	WB	12	0	5.0	98	11	13
Semivolatiles	Benzo(g,h,i)perylene	FS	7	0	7.9	10	4.7	0.35
Semivolatiles	Benzo(g,h,i)perylene	WB	12	0	9.9	200	22	25

Appendix D-3: Basin Summary Statistics
Rainbow Trout

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Semivolatiles	Benzo[b]Fluoranthene	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	Benzo[b]Fluoranthene	WB	12	0	5.0	200	15	26
Semivolatiles	Benzo[k]fluoranthene	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	Benzo[k]fluoranthene	WB	12	0	5.0	200	15	26
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	7	0	7.9	10	4.7	0.35
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	12	0	9.8	53	11	8.4
Semivolatiles	Chrysene	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	Chrysene	WB	12	0	4.9	27	5.5	4.2
Semivolatiles	Dibenz[a,h]anthracene	FS	7	0	7.9	10	4.7	0.35
Semivolatiles	Dibenz[a,h]anthracene	WB	12	0	9.9	200	22	25
Semivolatiles	Dibenzofuran	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	Dibenzofuran	WB	12	0	4.9	27	5.5	4.2
Semivolatiles	Fluoranthene	FS	7	0	7.9	10	4.7	0.35
Semivolatiles	Fluoranthene	WB	12	1	9.8	53	12	11
Semivolatiles	9H-Fluorene	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	9H-Fluorene	WB	12	0	4.9	27	5.5	4.2
Semivolatiles	Hexachlorobutadiene	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	Hexachlorobutadiene	WB	12	0	4.9	27	5.5	4.2
Semivolatiles	Hexachloroethane	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	Hexachloroethane	WB	12	0	4.9	27	5.5	4.2
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	7	0	7.9	10	4.7	0.35
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	12	0	9.9	200	22	25
Semivolatiles	Naphthalene	FS	7	0	5.9	24	7.7	3.4
Semivolatiles	Naphthalene	WB	12	0	5.1	33	10.0	4.3
Semivolatiles	Naphthalene, 1-methyl-	FS	7	0	4.1	5.1	2.4	0.16
Semivolatiles	Naphthalene, 1-methyl-	WB	12	0	4.9	27	5.5	4.2
Semivolatiles	Naphthalene, 2-methyl-	FS	7	3	4.8	11	5.4	3.3
Semivolatiles	Naphthalene, 2-methyl-	WB	12	1	5.0	27	6.0	3.9
Semivolatiles	Nitrobenzene	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	Nitrobenzene	WB	12	0	4.9	27	5.5	4.2
Semivolatiles	Phenanthrene	FS	7	0	4.0	5.1	2.3	0.17
Semivolatiles	Phenanthrene	WB	12	1	5.0	50	8.8	13
Semivolatiles	Pyrene	FS	7	0	7.9	10	4.7	0.35
Semivolatiles	Pyrene	WB	12	1	9.8	450	46	130
Semivolatiles	Retene	FS	7	0	7.9	10	4.7	0.35
Semivolatiles	Retene	WB	12	1	9.9	53	12	8.2

Appendix D-3: Basin Summary Statistics
Channel Catfish

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Dioxin/furans	2,3,7,8-TCDD	FS	2	2	0.0010	0.0014	0.0012	0.00029
Dioxin/furans	2,3,7,8-TCDD	WB	3	3	0.00066	0.0011	0.00087	0.00022
Dioxin/furans	1,2,3,7,8-PeCDD	FS	2	2	0.00049	0.00057	0.00053	0.000057
Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.00037	0.00055	0.00047	0.000092
Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	2	2	0.00014	0.00030	0.00022	0.00011
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	3	0.00020	0.00022	0.00021	0.000012
Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	2	2	0.00059	0.0011	0.00082	0.00033
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	3	0.00070	0.00085	0.00077	0.000076
Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	2	2	0.00014	0.00017	0.00016	0.000021
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	3	0.00012	0.00014	0.00013	0.000010
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	2	2	0.00047	0.0012	0.00086	0.00054
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00059	0.00073	0.00065	0.000074
Dioxin/furans	OCDD	FS	2	2	0.00037	0.0013	0.00081	0.00062
Dioxin/furans	OCDD	WB	3	3	0.00057	0.00086	0.00074	0.00015
Dioxin/furans	2,3,7,8-TCDF	FS	2	2	0.0022	0.0034	0.0028	0.00085
Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.0018	0.0031	0.0025	0.00064
Dioxin/furans	1,2,3,7,8-PeCDF	FS	2	2	0.00021	0.00031	0.00026	0.000071
Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.00014	0.00029	0.00020	0.000078
Dioxin/furans	2,3,4,7,8-PeCDF	FS	2	2	0.00052	0.00066	0.00059	0.000099
Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00033	0.00055	0.00045	0.00011
Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	2	1	0.000020	0.000090	0.000050	0.000057
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	3	0.000030	0.000080	0.000050	0.000026
Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	2	2	0.000030	0.000050	0.000040	0.000014
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	1	0.000010	0.000060	0.000025	0.000030
Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	2	0	0.000020	0.000020	0.000010	0.00
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	2	2	0.000050	0.000050	0.000050	0.00
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	2	0.000010	0.000060	0.000042	0.000032
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	2	0	0.000020	0.000050	0.000018	0.000011
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	2	0	0.000020	0.000050	0.000018	0.000011
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000030	0.000010	0.0000050
Dioxin/furans	OCDF	FS	2	2	0.000030	0.000090	0.000060	0.000042
Dioxin/furans	OCDF	WB	3	2	0.000010	0.000040	0.000020	0.000017
Guaiacols/Phenols	4-Chloroguaiacol	FS	5	0	910	940	460	5.6
Guaiacols/Phenols	4-Chloroguaiacol	WB	6	0	890	980	470	16
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	5	0	910	940	460	5.6
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	6	0	890	980	470	16
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	5	0	910	940	460	5.6
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	6	0	890	980	470	16
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	5	0	910	940	460	5.6
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	6	0	890	980	470	16
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	5	0	910	940	460	5.6
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	6	0	890	980	470	16
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	5	0	370	380	190	2.2
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	6	0	360	390	190	6.5
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	5	0	910	940	460	5.6
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	6	0	890	980	470	16
Guaiacols/Phenols	Tetrachloroguaiacol	FS	5	0	370	380	190	2.2
Guaiacols/Phenols	Tetrachloroguaiacol	WB	6	0	360	390	190	6.5
Guaiacols/Phenols	2-Chlorophenol	FS	5	0	370	380	190	2.2
Guaiacols/Phenols	2-Chlorophenol	WB	6	0	360	390	190	6.5
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	5	0	370	380	190	2.2
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	6	0	360	390	190	6.5
Guaiacols/Phenols	2,4-Dichlorophenol	FS	5	0	370	380	190	2.2
Guaiacols/Phenols	2,4-Dichlorophenol	WB	6	0	360	390	190	6.5
Guaiacols/Phenols	2,4-Dimethylphenol	FS	5	0	910	940	460	5.6
Guaiacols/Phenols	2,4-Dimethylphenol	WB	6	0	890	980	470	16
Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	5	0	370	380	190	2.2
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	6	0	360	390	190	6.5
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	5	0	370	380	190	2.2
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	6	0	360	390	190	6.5
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	5	0	370	380	190	2.2
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	6	0	360	390	190	6.5
Guaiacols/Phenols	Pentachlorophenol	FS	5	0	370	380	190	2.2
Guaiacols/Phenols	Pentachlorophenol	WB	6	0	360	390	190	6.5
Guaiacols/Phenols	Phenol	FS	5	0	370	380	190	2.2
Guaiacols/Phenols	Phenol	WB	6	0	360	390	190	6.5
Metals	Aluminum	FS	5	3	540	42,000	8,900	18,000
Metals	Aluminum	WB	6	6	1,700	9,000	5,700	3,100
Metals	Antimony	FS	5	0	50	50	25	0.00
Metals	Antimony	WB	6	0	50	50	25	0.00
Metals	Arsenic	FS	5	3	50	330	100	130
Metals	Arsenic	WB	6	6	110	430	230	130
Metals	Barium	FS	5	4	200	950	580	370
Metals	Barium	WB	6	6	490	1,900	1,000	570
Metals	Beryllium	FS	5	0	4.0	4.0	2.0	0.00

Appendix D-3: Basin Summary Statistics
Channel Catfish

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Metals	Beryllium	WB	6	0	4.0	4.0	2.0	0.00
Metals	Cadmium	FS	5	0	4.0	4.0	2.0	0.00
Metals	Cadmium	WB	6	6	13	26	17	4.8
Metals	Chromium	FS	5	5	110	350	210	100
Metals	Chromium	WB	6	6	210	280	250	27
Metals	Cobalt	FS	5	5	78	280	140	81
Metals	Cobalt	WB	6	6	120	210	170	31
Metals	Copper	FS	5	5	310	360	340	19
Metals	Copper	WB	6	6	410	590	510	61
Metals	Lead	FS	5	1	10	11	6.2	2.7
Metals	Lead	WB	6	6	12	33	21	7.0
Metals	Manganese	FS	5	5	130	360	220	95
Metals	Manganese	WB	6	6	1,200	2,800	2,100	570
Metals	Mercury	FS	5	5	240	280	260	17
Metals	Mercury	WB	6	6	140	320	210	60
Metals	Nickel	FS	5	2	30	77	35	29
Metals	Nickel	WB	6	6	90	130	100	15
Metals	Selenium	FS	5	3	240	500	250	11
Metals	Selenium	WB	6	6	410	630	500	93
Metals	Silver	FS	5	0	100	100	50	0.00
Metals	Silver	WB	6	0	100	100	50	0.00
Metals	Thallium	FS	5	0	50	50	25	0.00
Metals	Thallium	WB	6	0	50	50	25	0.00
Metals	Vanadium	FS	5	1	10	23	8.6	8.0
Metals	Vanadium	WB	6	6	48	190	110	50
Metals	Zinc	FS	5	5	7,800	10,000	9,000	1,000
Metals	Zinc	WB	6	6	17,000	19,000	18,000	790
PCBs	Aroclor 1016	FS	5	0	19	20	9.7	0.27
PCBs	Aroclor 1016	WB	6	0	16	20	9.2	0.75
PCBs	Aroclor 1221	FS	5	0	19	20	9.7	0.27
PCBs	Aroclor 1221	WB	6	0	16	20	9.2	0.75
PCBs	Aroclor 1232	FS	5	0	19	20	9.7	0.27
PCBs	Aroclor 1232	WB	6	0	16	20	9.2	0.75
PCBs	Aroclor 1242	FS	5	0	19	20	9.7	0.27
PCBs	Aroclor 1242	WB	6	0	16	20	9.2	0.75
PCBs	Aroclor 1248	FS	5	0	19	20	9.7	0.27
PCBs	Aroclor 1248	WB	6	0	16	20	9.2	0.75
PCBs	Aroclor 1254	FS	5	5	29	69	51	17
PCBs	Aroclor 1254	WB	6	6	25	58	38	11
PCBs	Aroclor 1260	FS	5	5	37	130	86	40
PCBs	Aroclor 1260	WB	6	6	32	140	77	37
PCBs	PCB 77	FS	2	2	0.036	0.037	0.036	0.00064
PCBs	PCB 77	WB	3	3	0.022	0.037	0.029	0.0075
PCBs	PCB 105	FS	2	2	2.0	3.9	3.0	1.3
PCBs	PCB 105	WB	3	3	1.3	3.3	2.3	0.97
PCBs	PCB 114	FS	2	2	0.19	0.42	0.31	0.16
PCBs	PCB 114	WB	3	3	0.12	0.33	0.23	0.10
PCBs	PCB 118	FS	2	2	4.6	9.1	6.8	3.2
PCBs	PCB 118	WB	3	3	2.9	7.1	4.9	2.1
PCBs	PCB 123	FS	2	2	0.092	0.18	0.14	0.064
PCBs	PCB 123	WB	3	3	0.059	0.15	0.11	0.046
PCBs	PCB 126	FS	2	1	0.0017	0.014	0.0073	0.0091
PCBs	PCB 126	WB	3	2	0.0017	0.030	0.013	0.015
PCBs	PCB 156	FS	2	2	0.91	1.9	1.4	0.70
PCBs	PCB 156	WB	3	3	0.52	1.5	1.0	0.50
PCBs	PCB 157	FS	2	2	0.17	0.36	0.26	0.14
PCBs	PCB 157	WB	3	3	0.099	0.28	0.19	0.091
PCBs	PCB 167	FS	2	2	0.35	0.75	0.55	0.29
PCBs	PCB 167	WB	3	3	0.22	0.56	0.40	0.17
PCBs	PCB 169	FS	2	0	0.0018	0.0026	0.0011	0.00028
PCBs	PCB 169	WB	3	0	0.0018	0.0027	0.0011	0.00022
PCBs	PCB 170	FS	2	2	1.7	3.9	2.8	1.6
PCBs	PCB 170	WB	3	3	1.00	3.0	2.0	0.98
PCBs	PCB 180	FS	2	2	4.3	10	7.3	4.3
PCBs	PCB 180	WB	3	3	3.2	9.2	6.2	3.0
PCBs	PCB 189	FS	2	2	0.058	0.13	0.096	0.054
PCBs	PCB 189	WB	3	3	0.033	0.10	0.067	0.034
Pesticides	Aldrin	FS	5	0	1.9	2.0	0.97	0.027
Pesticides	Aldrin	WB	6	0	1.6	2.0	0.92	0.075
Pesticides	Alpha-BHC	FS	5	0	1.9	2.0	0.97	0.027
Pesticides	Alpha-BHC	WB	6	0	1.6	2.0	0.92	0.075
Pesticides	Alpha-Chlordane	FS	5	0	1.9	2.0	0.97	0.027
Pesticides	Alpha-Chlordane	WB	6	0	1.6	2.0	0.92	0.075
Pesticides	Beta-BHC	FS	5	0	1.9	2.0	0.97	0.027
Pesticides	Beta-BHC	WB	6	0	1.6	2.0	0.92	0.075
Pesticides	cis-Chlordane (alpha-Chlordane)	FS	5	4	2.0	7.4	4.1	2.6
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	6	4	0.94	7.6	2.7	2.6

Appendix D-3: Basin Summary Statistics
Channel Catfish

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Pesticides	cis-Nonachlor	FS	5	3	1.9	5.2	2.3	1.7
Pesticides	cis-Nonachlor	WB	6	6	1.3	3.2	2.4	0.67
Pesticides	DDD-o,p'	FS	5	5	6.4	31	18	11
Pesticides	DDD-o,p'	WB	6	6	5.2	28	14	9.2
Pesticides	DDE-o,p'	FS	5	4	2.0	13	7.7	4.4
Pesticides	DDE-o,p'	WB	6	6	3.8	8.1	6.2	1.6
Pesticides	DDT-o,p'	FS	5	3	1.9	14	5.7	5.7
Pesticides	DDT-o,p'	WB	6	2	1.6	6.9	2.8	2.9
Pesticides	DDD-p,p'	FS	5	5	41	150	84	49
Pesticides	DDD-p,p'	WB	6	6	37	100	66	23
Pesticides	DDE-p,p'	FS	5	5	330	1,300	770	410
Pesticides	DDE-p,p'	WB	6	6	280	900	570	230
Pesticides	DDT-p,p'	FS	5	5	1.9	87	31	35
Pesticides	DDT-p,p'	WB	6	6	0.82	45	21	22
Pesticides	DDMU	FS	5	5	6.5	69	34	27
Pesticides	DDMU	WB	6	6	5.3	43	22	16
Pesticides	Delta-BHC	FS	5	0	1.9	2.0	0.97	0.027
Pesticides	Delta-BHC	WB	6	0	1.6	2.0	0.92	0.075
Pesticides	Endosulfan Sulfate	FS	5	3	1.9	3.1	1.9	0.97
Pesticides	Endosulfan Sulfate	WB	6	3	1.6	2.1	1.4	0.59
Pesticides	Gamma-Chlordane	FS	5	4	0.97	3.6	1.8	1.1
Pesticides	Gamma-Chlordane	WB	6	6	1.5	2.9	2.2	0.48
Pesticides	gamma-Chlordene	FS	5	0	1.9	2.0	0.97	0.027
Pesticides	gamma-Chlordene	WB	6	0	1.6	2.0	0.92	0.075
Pesticides	Heptachlor	FS	5	0	1.9	2.0	0.97	0.027
Pesticides	Heptachlor	WB	6	0	1.6	2.0	0.92	0.075
Pesticides	Heptachlor Epoxide	FS	5	0	1.9	2.0	0.97	0.027
Pesticides	Heptachlor Epoxide	WB	6	0	1.6	2.0	0.92	0.075
Pesticides	Hexachlorobenzene	FS	5	4	1.9	5.9	3.5	1.9
Pesticides	Hexachlorobenzene	WB	6	6	3.1	6.7	5.1	1.3
Pesticides	Lindane	FS	5	0	1.9	2.0	0.97	0.027
Pesticides	Lindane	WB	6	0	1.6	2.0	0.92	0.075
Pesticides	Mirex	FS	5	2	1.9	5.9	2.3	2.2
Pesticides	Mirex	WB	6	3	1.9	7.6	3.3	3.0
Pesticides	Oxychlordane	FS	5	5	1.0	2.6	1.5	0.64
Pesticides	Oxychlordane	WB	6	5	1.4	2.7	1.8	0.68
Pesticides	Pentachloroanisol	FS	5	2	0.99	2.0	1.00	0.061
Pesticides	Pentachloroanisol	WB	6	3	0.96	2.0	0.97	0.12
Pesticides	Toxaphene	FS	5	0	57	59	29	0.42
Pesticides	Toxaphene	WB	6	0	49	60	28	2.2
Pesticides	trans-Nonachlor	FS	5	5	5.3	13	9.2	3.5
Pesticides	trans-Nonachlor	WB	6	6	4.3	13	9.3	3.4
Semivolatiles	1,2,4-Trichlorobenzene	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	1,2,4-Trichlorobenzene	WB	6	0	8.9	9.8	4.7	0.16
Semivolatiles	1,2-Diphenylhydrazine	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	1,2-Diphenylhydrazine	WB	6	0	8.9	9.8	4.7	0.16
Semivolatiles	2,4-Dinitrotoluene	FS	5	0	18	19	9.2	0.11
Semivolatiles	2,4-Dinitrotoluene	WB	6	0	18	20	9.5	0.31
Semivolatiles	2,6-Dinitrotoluene	FS	5	0	36	38	18	0.23
Semivolatiles	2,6-Dinitrotoluene	WB	6	0	36	39	19	0.63
Semivolatiles	2-Chloronaphthalene	FS	5	0	18	19	9.2	0.11
Semivolatiles	2-Chloronaphthalene	WB	6	0	18	20	9.5	0.31
Semivolatiles	4-Bromophenyl-Phenylether	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	4-Bromophenyl-Phenylether	WB	6	0	8.9	9.8	4.7	0.16
Semivolatiles	4-Chlorophenyl-Phenylether	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	4-Chlorophenyl-Phenylether	WB	6	0	8.9	9.8	4.7	0.16
Semivolatiles	Acenaphthene	FS	5	0	18	19	9.2	0.11
Semivolatiles	Acenaphthene	WB	6	0	18	20	9.5	0.31
Semivolatiles	Acenaphthylene	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	Acenaphthylene	WB	6	0	8.9	9.8	4.7	0.16
Semivolatiles	Anthracene	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	Anthracene	WB	6	0	8.9	9.8	4.7	0.16
Semivolatiles	Benzene, 1,2-dichloro-	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	Benzene, 1,2-dichloro-	WB	6	0	8.9	9.8	4.7	0.16
Semivolatiles	Benzene, 1,3-dichloro-	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	Benzene, 1,3-dichloro-	WB	6	0	8.9	9.8	4.7	0.16
Semivolatiles	Benzene, 1,4-dichloro-	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	Benzene, 1,4-dichloro-	WB	6	0	8.9	9.8	4.7	0.16
Semivolatiles	Benzo(a)anthracene	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	Benzo(a)anthracene	WB	6	0	8.9	9.8	4.7	0.16
Semivolatiles	Benzo(a)pyrene	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	Benzo(a)pyrene	WB	6	0	8.9	49	8.0	8.1
Semivolatiles	Benzo(g,h,i)perylene	FS	5	0	18	19	9.2	0.11
Semivolatiles	Benzo(g,h,i)perylene	WB	6	1	15	98	17	16
Semivolatiles	Benzo[b]Fluoranthene	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	Benzo[b]Fluoranthene	WB	6	0	8.9	49	8.0	8.1
Semivolatiles	Benzo[k]fluoranthene	FS	5	0	9.1	9.4	4.6	0.057

Appendix D-3: Basin Summary Statistics
Channel Catfish

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Semivolatiles	Benzo[k]fluoranthene	WB	6	0	8.9	49	8.0	8.1
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	5	0	18	19	9.2	0.11
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	6	0	18	20	9.5	0.31
Semivolatiles	Chrysene	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	Chrysene	WB	6	0	8.9	9.8	4.7	0.16
Semivolatiles	Dibenz[a,h]anthracene	FS	5	0	18	19	9.2	0.11
Semivolatiles	Dibenz[a,h]anthracene	WB	6	0	18	98	16	16
Semivolatiles	Dibenzofuran	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	Dibenzofuran	WB	6	0	8.9	9.8	4.7	0.16
Semivolatiles	Fluoranthene	FS	5	0	18	19	9.2	0.11
Semivolatiles	Fluoranthene	WB	6	0	18	20	9.5	0.31
Semivolatiles	9H-Fluorene	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	9H-Fluorene	WB	6	0	8.9	9.8	4.7	0.16
Semivolatiles	Hexachlorobutadiene	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	Hexachlorobutadiene	WB	6	0	8.9	9.8	4.7	0.16
Semivolatiles	Hexachloroethane	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	Hexachloroethane	WB	6	0	8.9	9.8	4.7	0.16
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	5	0	18	19	9.2	0.11
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	6	0	18	98	16	16
Semivolatiles	Naphthalene	FS	5	0	15	27	10	2.5
Semivolatiles	Naphthalene	WB	6	0	12	24	9.2	2.7
Semivolatiles	Naphthalene, 1-methyl-	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	Naphthalene, 1-methyl-	WB	6	0	8.9	9.8	4.7	0.16
Semivolatiles	Naphthalene, 2-methyl-	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	Naphthalene, 2-methyl-	WB	6	0	8.9	9.8	4.7	0.16
Semivolatiles	Nitrobenzene	FS	5	0	9.1	9.4	4.6	0.057
Semivolatiles	Nitrobenzene	WB	6	0	8.9	9.8	4.7	0.16
Semivolatiles	Phenanthrene	FS	5	0	9.1	9.8	4.7	0.14
Semivolatiles	Phenanthrene	WB	6	0	8.9	9.8	4.7	0.16
Semivolatiles	Pyrene	FS	5	0	18	19	9.2	0.11
Semivolatiles	Pyrene	WB	6	0	18	20	9.5	0.31
Semivolatiles	Retene	FS	5	0	18	19	9.2	0.11
Semivolatiles	Retene	WB	6	0	18	20	9.5	0.31

Appendix D-3: Basin Summary Statistics
Smallmouth Bass

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	570	840	370	77
Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	860	900	440	12
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	570	840	370	77
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	860	900	440	12
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	570	840	370	77
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	860	900	440	12
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	570	840	370	77
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	860	900	440	12
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	570	840	370	77
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	860	900	440	12
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	230	340	150	31
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	340	360	170	4.7
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	570	840	370	77
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	860	900	440	12
Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	230	340	150	31
Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	340	360	170	4.7
Guaiacols/Phenols	2-Chlorophenol	FS	3	0	230	340	150	31
Guaiacols/Phenols	2-Chlorophenol	WB	3	0	340	360	170	4.7
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	230	340	150	31
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	340	360	170	4.7
Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	230	340	150	31
Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	340	360	170	4.7
Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	570	840	370	77
Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	860	900	440	12
Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	230	340	150	31
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	340	360	170	4.7
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	230	340	150	31
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	340	360	170	4.7
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	230	340	150	31
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	340	360	170	4.7
Guaiacols/Phenols	Pentachlorophenol	FS	3	0	230	340	150	31
Guaiacols/Phenols	Pentachlorophenol	WB	3	0	340	360	170	4.7
Guaiacols/Phenols	Phenol	FS	3	0	230	340	150	31
Guaiacols/Phenols	Phenol	WB	3	0	340	360	170	4.7
Metals	Aluminum	FS	3	3	5,000	8,100	6,500	1,500
Metals	Aluminum	WB	3	3	1,000	1,500	1,300	260
Metals	Antimony	FS	3	0	50	50	25	0.00
Metals	Antimony	WB	3	0	50	50	25	0.00
Metals	Arsenic	FS	3	3	110	170	140	31
Metals	Arsenic	WB	3	3	160	170	170	5.8
Metals	Barium	FS	3	3	360	610	490	130
Metals	Barium	WB	3	3	550	960	740	210
Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
Metals	Cadmium	WB	3	3	4.8	19	12	7.1
Metals	Chromium	FS	3	3	220	330	280	57
Metals	Chromium	WB	3	2	100	230	140	90
Metals	Cobalt	FS	3	3	14	16	15	1.2
Metals	Cobalt	WB	3	3	120	190	140	40
Metals	Copper	FS	3	3	510	560	540	28
Metals	Copper	WB	3	3	500	560	520	31
Metals	Lead	FS	3	2	10	55	28	25
Metals	Lead	WB	3	3	10	140	66	64
Metals	Manganese	FS	3	3	750	1,100	870	180
Metals	Manganese	WB	3	3	2,000	2,400	2,300	240
Metals	Mercury	FS	3	3	380	470	420	48
Metals	Mercury	WB	3	3	220	360	300	69
Metals	Nickel	FS	3	3	130	340	200	120
Metals	Nickel	WB	3	3	54	96	76	21
Metals	Selenium	FS	3	3	450	530	490	39
Metals	Selenium	WB	3	3	480	710	590	110
Metals	Silver	FS	3	0	100	100	50	0.00
Metals	Silver	WB	3	0	100	100	50	0.00
Metals	Thallium	FS	3	0	50	50	25	0.00
Metals	Thallium	WB	3	0	50	50	25	0.00
Metals	Vanadium	FS	3	1	10	14	8.0	5.2
Metals	Vanadium	WB	3	3	19	88	63	38
Metals	Zinc	FS	3	3	9,200	10,000	9,700	430
Metals	Zinc	WB	3	3	15,000	18,000	17,000	1,300
PCBs	Aroclor 1016	FS	3	0	18	23	10	1.3
PCBs	Aroclor 1016	WB	3	0	18	20	9.7	0.58
PCBs	Aroclor 1221	FS	3	0	18	23	10	1.3
PCBs	Aroclor 1221	WB	3	0	18	20	9.7	0.58
PCBs	Aroclor 1232	FS	3	0	18	23	10	1.3
PCBs	Aroclor 1232	WB	3	0	18	20	9.7	0.58

Appendix D-3: Basin Summary Statistics
Smallmouth Bass

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
PCBs	Aroclor 1242	FS	3	0	18	23	10	1.3
PCBs	Aroclor 1242	WB	3	0	18	20	9.7	0.58
PCBs	Aroclor 1248	FS	3	0	18	23	10	1.3
PCBs	Aroclor 1248	WB	3	0	18	20	9.7	0.58
PCBs	Aroclor 1254	FS	3	3	38	83	55	25
PCBs	Aroclor 1254	WB	3	3	46	94	66	25
PCBs	Aroclor 1260	FS	3	3	68	220	120	87
PCBs	Aroclor 1260	WB	3	3	80	190	130	56
Pesticides	Aldrin	FS	3	0	1.8	2.3	1.0	0.13
Pesticides	Aldrin	WB	3	0	1.8	2.0	0.97	0.058
Pesticides	Alpha-BHC	FS	3	0	1.8	2.3	1.0	0.13
Pesticides	Alpha-BHC	WB	3	0	1.8	2.0	0.97	0.058
Pesticides	Alpha-Chlordane	FS	3	0	1.8	2.3	1.0	0.13
Pesticides	Alpha-Chlordane	WB	3	0	1.8	2.0	0.97	0.058
Pesticides	Beta-BHC	FS	3	0	1.8	2.3	1.0	0.13
Pesticides	Beta-BHC	WB	3	0	1.8	2.0	0.97	0.058
Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	1	1.8	4.1	2.1	1.8
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	2	2.0	4.7	3.1	1.9
Pesticides	cis-Nonachlor	FS	3	0	1.8	2.3	1.0	0.13
Pesticides	cis-Nonachlor	WB	3	1	1.4	2.0	1.1	0.26
Pesticides	DDD-o,p'	FS	3	3	11	20	15	4.5
Pesticides	DDD-o,p'	WB	3	3	18	27	21	4.9
Pesticides	DDE-o,p'	FS	3	3	5.2	9.4	6.7	2.3
Pesticides	DDE-o,p'	WB	3	3	10	14	12	2.0
Pesticides	DDT-o,p'	FS	3	3	5.7	18	9.9	7.0
Pesticides	DDT-o,p'	WB	3	3	12	20	17	4.4
Pesticides	DDD-p,p'	FS	3	3	30	85	51	30
Pesticides	DDD-p,p'	WB	3	3	40	63	54	12
Pesticides	DDE-p,p'	FS	3	3	480	1,200	770	380
Pesticides	DDE-p,p'	WB	3	3	970	1,700	1,300	370
Pesticides	DDT-p,p'	FS	3	3	23	48	34	13
Pesticides	DDT-p,p'	WB	3	3	44	80	62	18
Pesticides	DDMU	FS	3	3	20	56	32	21
Pesticides	DDMU	WB	3	3	33	55	41	12
Pesticides	Delta-BHC	FS	3	0	1.8	2.3	1.0	0.13
Pesticides	Delta-BHC	WB	3	0	1.8	2.0	0.97	0.058
Pesticides	Endosulfan Sulfate	FS	3	3	1.5	3.0	2.1	0.78
Pesticides	Endosulfan Sulfate	WB	3	3	2.4	5.6	3.8	1.6
Pesticides	Gamma-Chlordane	FS	3	1	1.8	14	5.4	7.5
Pesticides	Gamma-Chlordane	WB	3	0	1.8	2.0	0.97	0.058
Pesticides	gamma-Chlordene	FS	3	0	1.8	2.3	1.0	0.13
Pesticides	gamma-Chlordene	WB	3	0	1.8	2.0	0.97	0.058
Pesticides	Heptachlor	FS	3	0	1.8	2.3	1.0	0.13
Pesticides	Heptachlor	WB	3	0	1.8	2.0	0.97	0.058
Pesticides	Heptachlor Epoxide	FS	3	0	1.8	2.3	1.0	0.13
Pesticides	Heptachlor Epoxide	WB	3	0	1.8	2.0	0.97	0.058
Pesticides	Hexachlorobenzene	FS	3	1	1.8	2.4	1.5	0.80
Pesticides	Hexachlorobenzene	WB	3	3	1.1	1.4	1.2	0.15
Pesticides	Lindane	FS	3	0	1.8	2.3	1.0	0.13
Pesticides	Lindane	WB	3	0	1.8	2.0	0.97	0.058
Pesticides	Mirex	FS	3	0	1.8	2.3	1.0	0.13
Pesticides	Mirex	WB	3	0	1.8	2.0	0.97	0.058
Pesticides	Oxychlordane	FS	3	1	1.6	2.3	1.2	0.35
Pesticides	Oxychlordane	WB	3	3	1.4	2.6	1.8	0.67
Pesticides	Pentachloroanisol	FS	3	1	0.79	2.3	0.95	0.18
Pesticides	Pentachloroanisol	WB	3	1	0.99	2.0	0.96	0.055
Pesticides	Toxaphene	FS	3	0	54	68	30	3.5
Pesticides	Toxaphene	WB	3	0	55	60	29	1.3
Pesticides	trans-Nonachlor	FS	3	3	2.6	8.6	4.7	3.4
Pesticides	trans-Nonachlor	WB	3	3	7.1	14	10	3.5
Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	2,4-Dinitrotoluene	FS	3	0	11	17	7.5	1.5
Semivolatiles	2,4-Dinitrotoluene	WB	3	0	17	18	8.7	0.24
Semivolatiles	2,6-Dinitrotoluene	FS	3	0	23	34	15	3.1
Semivolatiles	2,6-Dinitrotoluene	WB	3	0	34	36	17	0.47
Semivolatiles	2-Chloronaphthalene	FS	3	0	11	17	7.5	1.5
Semivolatiles	2-Chloronaphthalene	WB	3	0	17	18	8.7	0.24
Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	Acenaphthene	FS	3	0	11	17	7.5	1.5
Semivolatiles	Acenaphthene	WB	3	0	17	18	8.7	0.24

Appendix D-3: Basin Summary Statistics
Smallmouth Bass

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Semivolatiles	Acenaphthylene	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	Acenaphthylene	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	Anthracene	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	Anthracene	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	Benzo(a)anthracene	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	Benzo(a)anthracene	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	Benzo(a)pyrene	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	Benzo(a)pyrene	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	11	17	7.5	1.5
Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	17	18	8.7	0.24
Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	Benzo[k]fluoranthene	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	11	17	7.5	1.5
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	17	18	8.7	0.24
Semivolatiles	Chrysene	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	Chrysene	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	11	17	7.5	1.5
Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	17	18	8.7	0.24
Semivolatiles	Dibenzofuran	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	Dibenzofuran	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	Fluoranthene	FS	3	0	11	17	7.5	1.5
Semivolatiles	Fluoranthene	WB	3	0	17	18	8.7	0.24
Semivolatiles	9H-Fluorene	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	9H-Fluorene	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	Hexachlorobutadiene	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	Hexachlorobutadiene	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	Hexachloroethane	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	Hexachloroethane	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	11	17	7.5	1.5
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	17	18	8.7	0.24
Semivolatiles	Naphthalene	FS	3	0	10	17	6.3	1.8
Semivolatiles	Naphthalene	WB	3	0	9.4	24	8.4	3.7
Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	Nitrobenzene	FS	3	0	5.7	8.4	3.8	0.78
Semivolatiles	Nitrobenzene	WB	3	0	8.6	9.0	4.4	0.12
Semivolatiles	Phenanthrene	FS	3	0	5.7	9.9	4.0	1.1
Semivolatiles	Phenanthrene	WB	3	1	8.6	16	8.2	6.8
Semivolatiles	Pyrene	FS	3	0	11	17	7.5	1.5
Semivolatiles	Pyrene	WB	3	0	17	18	8.7	0.24
Semivolatiles	Retene	FS	3	0	11	17	7.5	1.5
Semivolatiles	Retene	WB	3	0	17	18	8.7	0.24

Appendix D-3: Basin Summary Statistics
Coho Salmon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Dioxin/furans	2,3,7,8-TCDD	E	3	2	0.000010	0.000050	0.000035	0.000026
Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000010	0.000040	0.000017	0.000020
Dioxin/furans	2,3,7,8-TCDD	WB	3	0	0.000010	0.000050	0.000017	0.000010
Dioxin/furans	1,2,3,7,8-PeCDD	E	3	1	0.000010	0.00010	0.000037	0.000055
Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000010	0.000060	0.000038	0.000029
Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	0	0.000010	0.000060	0.000020	0.000013
Dioxin/furans	1,2,3,4,7,8-HxCDD	E	3	1	0.000010	0.000010	0.0000067	0.0000029
Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	0	0.000010	0.000010	0.0000050	0.00
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
Dioxin/furans	1,2,3,6,7,8-HxCDD	E	3	2	0.000010	0.000080	0.000048	0.000039
Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	2	0.000010	0.000050	0.000035	0.000026
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
Dioxin/furans	1,2,3,7,8,9-HxCDD	E	3	0	0.000010	0.000010	0.0000050	0.00
Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	1	0.000010	0.000030	0.000013	0.000014
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	1	0.000020	0.000020	0.000013	0.0000058
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	E	3	3	0.000080	0.00021	0.00014	0.000065
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.000010	0.00018	0.000095	0.000088
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	1	0.000010	0.000060	0.000030	0.000028
Dioxin/furans	OCDD	E	3	3	0.0013	0.0025	0.0018	0.00066
Dioxin/furans	OCDD	FS	3	3	0.000090	0.00085	0.00037	0.00042
Dioxin/furans	OCDD	WB	3	2	0.000010	0.00025	0.00014	0.00012
Dioxin/furans	2,3,7,8-TCDF	E	3	3	0.00029	0.00066	0.00051	0.00020
Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.00035	0.00054	0.00046	0.000097
Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00036	0.00049	0.00044	0.000072
Dioxin/furans	1,2,3,7,8-PeCDF	E	3	1	0.000010	0.000030	0.000013	0.000014
Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	0	0.000020	0.000030	0.000013	0.0000029
Dioxin/furans	2,3,4,7,8-PeCDF	E	3	2	0.000010	0.00010	0.000068	0.000055
Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	2	0.000010	0.000090	0.000048	0.000043
Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	2	0.000020	0.000080	0.000050	0.000036
Dioxin/furans	1,2,3,4,7,8-HxCDF	E	3	2	0.000010	0.000050	0.000025	0.000023
Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
Dioxin/furans	1,2,3,6,7,8-HxCDF	E	3	1	0.000010	0.000030	0.000013	0.000014
Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
Dioxin/furans	1,2,3,7,8,9-HxCDF	E	3	2	0.000010	0.000030	0.000022	0.000014
Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
Dioxin/furans	2,3,4,6,7,8-HxCDF	E	3	1	0.000010	0.000040	0.000017	0.000020
Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	0	0.000010	0.000020	0.0000083	0.0000029
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	E	3	1	0.000010	0.00019	0.000067	0.00011
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	2	0.000010	0.000050	0.000028	0.000023
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	0	0.000010	0.000030	0.000012	0.0000058
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	E	3	2	0.000010	0.000050	0.000032	0.000024
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000010	0.0000050	0.00
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	0	0.000010	0.000030	0.000012	0.0000058
Dioxin/furans	OCDF	E	3	2	0.000010	0.00022	0.00014	0.00011
Dioxin/furans	OCDF	FS	3	0	0.000020	0.000020	0.000010	0.00
Dioxin/furans	OCDF	WB	3	0	0.000030	0.000060	0.000025	0.0000087
Guaiacols/Phenols	4-Chloroguaiacol	E	3	0	970	1,000	490	9.5
Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	950	970	480	6.5
Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	880	960	460	21
Guaiacols/Phenols	3,4-Dichloroguaiacol	E	3	0	970	1,000	490	9.5
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	950	970	480	6.5
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	880	960	460	21
Guaiacols/Phenols	4,5-Dichloroguaiacol	E	3	0	970	1,000	490	9.5
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	950	970	480	6.5
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	880	960	460	21
Guaiacols/Phenols	4,6-Dichloroguaiacol	E	3	0	970	1,000	490	9.5
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	950	970	480	6.5
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	880	960	460	21
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	E	3	0	970	1,000	490	9.5
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	950	970	480	6.5
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	880	960	460	21
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	E	3	0	390	400	200	3.8
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	380	390	190	2.5
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	350	390	180	8.5
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	E	3	0	970	1,000	490	9.5
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	950	970	480	6.5
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	880	960	460	21
Guaiacols/Phenols	Tetrachloroguaiacol	E	3	0	390	400	200	3.8
Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	380	390	190	2.5
Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	350	390	180	8.5
Guaiacols/Phenols	2-Chlorophenol	E	3	0	390	400	200	3.8

Appendix D-3: Basin Summary Statistics
Coho Salmon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Guaiacols/Phenols	2-Chlorophenol	FS	3	0	380	390	190	2.5
Guaiacols/Phenols	2-Chlorophenol	WB	3	0	350	390	180	8.5
Guaiacols/Phenols	4-Chloro-3-methylphenol	E	3	0	390	400	200	3.8
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	380	390	190	2.5
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	350	390	180	8.5
Guaiacols/Phenols	2,4-Dichlorophenol	E	3	0	390	400	200	3.8
Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	380	390	190	2.5
Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	350	390	180	8.5
Guaiacols/Phenols	2,4-Dimethylphenol	E	3	0	970	1,000	490	9.5
Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	950	970	480	6.5
Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	880	960	460	21
Guaiacols/Phenols	2,4,5-Trichlorophenol	E	3	0	390	400	200	3.8
Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	380	390	190	2.5
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	3	0	350	390	180	8.5
Guaiacols/Phenols	2,4,6-Trichlorophenol	E	3	0	390	400	200	3.8
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	380	390	190	2.5
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	350	390	180	8.5
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	E	3	0	390	400	200	3.8
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	380	390	190	2.5
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	3	0	350	390	180	8.5
Guaiacols/Phenols	Pentachlorophenol	E	3	0	390	400	200	3.8
Guaiacols/Phenols	Pentachlorophenol	FS	3	0	380	390	190	2.5
Guaiacols/Phenols	Pentachlorophenol	WB	3	0	350	390	180	8.5
Guaiacols/Phenols	Phenol	E	3	0	390	400	200	3.8
Guaiacols/Phenols	Phenol	FS	3	0	380	390	190	2.5
Guaiacols/Phenols	Phenol	WB	3	0	350	390	180	8.5
Metals	Aluminum	E	3	1	1,000	1,600	850	610
Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
Metals	Aluminum	WB	3	0	1,000	1,000	500	0.00
Metals	Antimony	E	3	0	50	50	25	0.00
Metals	Antimony	FS	3	0	50	50	25	0.00
Metals	Antimony	WB	3	0	50	50	25	0.00
Metals	Arsenic	E	3	3	310	360	330	26
Metals	Arsenic	FS	3	3	450	600	540	78
Metals	Arsenic	WB	3	3	450	560	500	53
Metals	Barium	E	3	0	200	200	100	0.00
Metals	Barium	FS	3	1	200	270	160	98
Metals	Barium	WB	3	1	200	220	140	69
Metals	Beryllium	E	3	0	4.0	4.0	2.0	0.00
Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Metals	Cadmium	E	3	0	4.0	4.0	2.0	0.00
Metals	Cadmium	FS	3	0	4.0	4.0	2.0	0.00
Metals	Cadmium	WB	3	3	19	27	22	4.2
Metals	Chromium	E	3	0	100	100	50	0.00
Metals	Chromium	FS	3	3	120	190	140	40
Metals	Chromium	WB	3	3	120	140	130	10
Metals	Cobalt	E	3	3	10	14	12	2.1
Metals	Cobalt	FS	3	3	110	140	120	14
Metals	Cobalt	WB	3	3	120	140	120	15
Metals	Copper	E	3	3	4,100	5,000	4,500	470
Metals	Copper	FS	3	3	680	3,600	1,700	1,600
Metals	Copper	WB	3	3	720	2,400	1,300	880
Metals	Lead	E	3	0	10	10	5.0	0.00
Metals	Lead	FS	3	2	10	230	81	120
Metals	Lead	WB	3	3	11	20	15	4.7
Metals	Manganese	E	3	3	630	790	700	83
Metals	Manganese	FS	3	3	120	330	190	110
Metals	Manganese	WB	3	3	390	560	500	94
Metals	Mercury	E	3	0	100	100	50	0.00
Metals	Mercury	FS	3	3	110	120	120	7.6
Metals	Mercury	WB	3	3	73	130	100	28
Metals	Nickel	E	3	3	35	150	84	57
Metals	Nickel	FS	3	2	30	100	54	44
Metals	Nickel	WB	3	3	53	3,400	1,200	1,900
Metals	Selenium	E	3	3	1,100	1,300	1,200	72
Metals	Selenium	FS	3	3	270	310	290	21
Metals	Selenium	WB	3	3	330	420	360	49
Metals	Silver	E	3	0	100	100	50	0.00
Metals	Silver	FS	3	0	100	100	50	0.00
Metals	Silver	WB	3	0	100	100	50	0.00
Metals	Thallium	E	3	0	50	50	25	0.00
Metals	Thallium	FS	3	0	50	50	25	0.00
Metals	Thallium	WB	3	0	50	50	25	0.00
Metals	Vanadium	E	3	3	17	41	28	12
Metals	Vanadium	FS	3	1	10	12	7.3	4.0

Appendix D-3: Basin Summary Statistics
Coho Salmon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Metals	Vanadium	WB	3	3	32	45	38	6.7
Metals	Zinc	E	3	3	30,000	34,000	31,000	2,200
Metals	Zinc	FS	3	3	6,700	7,800	7,100	590
Metals	Zinc	WB	3	3	28,000	32,000	30,000	2,000
PCBs	Aroclor 1016	E	3	0	19	19	9.5	0.00
PCBs	Aroclor 1016	FS	3	0	18	20	9.7	0.58
PCBs	Aroclor 1016	WB	3	0	18	20	9.5	0.50
PCBs	Aroclor 1221	E	3	0	19	19	9.5	0.00
PCBs	Aroclor 1221	FS	3	0	18	20	9.7	0.58
PCBs	Aroclor 1221	WB	3	0	18	20	9.5	0.50
PCBs	Aroclor 1232	E	3	0	19	19	9.5	0.00
PCBs	Aroclor 1232	FS	3	0	18	20	9.7	0.58
PCBs	Aroclor 1232	WB	3	0	18	20	9.5	0.50
PCBs	Aroclor 1242	E	3	0	19	19	9.5	0.00
PCBs	Aroclor 1242	FS	3	0	18	20	9.7	0.58
PCBs	Aroclor 1242	WB	3	0	18	20	9.5	0.50
PCBs	Aroclor 1248	E	3	0	19	19	9.5	0.00
PCBs	Aroclor 1248	FS	3	0	18	20	9.7	0.58
PCBs	Aroclor 1248	WB	3	0	18	20	9.5	0.50
PCBs	Aroclor 1254	E	3	3	11	17	15	3.5
PCBs	Aroclor 1254	FS	3	3	12	19	16	3.5
PCBs	Aroclor 1254	WB	3	3	18	19	19	0.58
PCBs	Aroclor 1260	E	3	0	19	19	9.5	0.00
PCBs	Aroclor 1260	FS	3	0	18	20	9.7	0.58
PCBs	Aroclor 1260	WB	3	0	18	20	9.5	0.50
PCBs	PCB 77	E	3	3	0.010	0.011	0.010	0.00030
PCBs	PCB 77	FS	3	3	0.0080	0.0084	0.0082	0.00017
PCBs	PCB 77	WB	3	3	0.0088	0.011	0.0099	0.0013
PCBs	PCB 105	E	3	3	0.27	0.35	0.32	0.041
PCBs	PCB 105	FS	3	3	0.27	0.31	0.30	0.026
PCBs	PCB 105	WB	3	3	0.29	0.33	0.31	0.020
PCBs	PCB 114	E	3	3	0.024	0.034	0.029	0.0053
PCBs	PCB 114	FS	3	3	0.024	0.032	0.028	0.0040
PCBs	PCB 114	WB	3	3	0.024	0.031	0.027	0.0036
PCBs	PCB 118	E	3	3	0.68	0.76	0.72	0.042
PCBs	PCB 118	FS	3	3	0.67	0.74	0.72	0.039
PCBs	PCB 118	WB	3	3	0.68	0.77	0.73	0.045
PCBs	PCB 123	E	3	3	0.011	0.013	0.012	0.0010
PCBs	PCB 123	FS	3	3	0.0094	0.015	0.012	0.0029
PCBs	PCB 123	WB	3	3	0.0088	0.011	0.0099	0.0012
PCBs	PCB 126	E	3	0	0.00077	0.0011	0.00048	0.000081
PCBs	PCB 126	FS	3	0	0.00085	0.0020	0.00071	0.00029
PCBs	PCB 126	WB	3	3	0.0031	0.0035	0.0033	0.00018
PCBs	PCB 156	E	3	3	0.082	0.10	0.089	0.0095
PCBs	PCB 156	FS	3	3	0.095	0.12	0.11	0.013
PCBs	PCB 156	WB	3	3	0.090	0.11	0.097	0.0075
PCBs	PCB 157	E	3	3	0.018	0.023	0.020	0.0030
PCBs	PCB 157	FS	3	3	0.021	0.026	0.022	0.0030
PCBs	PCB 157	WB	3	3	0.020	0.022	0.021	0.00085
PCBs	PCB 167	E	3	3	0.035	0.038	0.037	0.0015
PCBs	PCB 167	FS	3	3	0.045	0.051	0.047	0.0034
PCBs	PCB 167	WB	3	3	0.042	0.049	0.046	0.0041
PCBs	PCB 169	E	3	0	0.0010	0.0013	0.00055	0.000075
PCBs	PCB 169	FS	3	0	0.0010	0.0011	0.00052	0.000015
PCBs	PCB 169	WB	3	0	0.0010	0.0010	0.00050	0.00
PCBs	PCB 170	E	3	3	0.15	0.19	0.16	0.023
PCBs	PCB 170	FS	3	3	0.20	0.22	0.21	0.012
PCBs	PCB 170	WB	3	3	0.18	0.19	0.19	0.0035
PCBs	PCB 180	E	3	3	0.44	0.58	0.50	0.068
PCBs	PCB 180	FS	3	3	0.64	0.73	0.69	0.043
PCBs	PCB 180	WB	3	3	0.57	0.62	0.59	0.027
PCBs	PCB 189	E	3	3	0.0051	0.0068	0.0058	0.00088
PCBs	PCB 189	FS	3	3	0.0079	0.0091	0.0086	0.00060
PCBs	PCB 189	WB	3	3	0.0073	0.0079	0.0076	0.00031
Pesticides	Aldrin	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	Aldrin	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	Aldrin	WB	3	0	1.8	2.0	0.95	0.050
Pesticides	Alpha-BHC	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	Alpha-BHC	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	Alpha-BHC	WB	3	0	1.8	2.0	0.95	0.050
Pesticides	Alpha-Chlordene	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	Alpha-Chlordene	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	Alpha-Chlordene	WB	3	0	1.8	2.0	0.95	0.050
Pesticides	Beta-BHC	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	Beta-BHC	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	Beta-BHC	WB	3	0	1.8	2.0	0.95	0.050

Appendix D-3: Basin Summary Statistics
Coho Salmon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Pesticides	cis-Chlordane (alpha-Chlordane)	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	1.8	2.0	0.95	0.050
Pesticides	cis-Nonachlor	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	cis-Nonachlor	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	cis-Nonachlor	WB	3	0	1.8	2.0	0.95	0.050
Pesticides	DDD-o,p'	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	DDD-o,p'	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	DDD-o,p'	WB	3	0	1.8	2.0	0.95	0.050
Pesticides	DDE-o,p'	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	DDE-o,p'	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	DDE-o,p'	WB	3	0	1.8	2.0	0.95	0.050
Pesticides	DDT-o,p'	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	DDT-o,p'	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	DDT-o,p'	WB	3	0	1.8	2.0	0.95	0.050
Pesticides	DDD-p,p'	E	3	3	2.7	2.9	2.8	0.12
Pesticides	DDD-p,p'	FS	3	3	2.5	2.9	2.7	0.21
Pesticides	DDD-p,p'	WB	3	2	1.8	2.1	1.6	0.62
Pesticides	DDE-p,p'	E	3	3	31	33	32	1.0
Pesticides	DDE-p,p'	FS	3	3	29	35	33	3.2
Pesticides	DDE-p,p'	WB	3	3	31	37	35	3.5
Pesticides	DDT-p,p'	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	DDT-p,p'	FS	3	1	1.8	4.0	2.0	1.8
Pesticides	DDT-p,p'	WB	3	2	2.0	4.0	3.0	1.7
Pesticides	DDMU	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	DDMU	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	DDMU	WB	3	0	1.8	2.0	0.95	0.050
Pesticides	Delta-BHC	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	Delta-BHC	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	Delta-BHC	WB	3	0	1.8	2.0	0.95	0.050
Pesticides	Endosulfan Sulfate	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	Endosulfan Sulfate	FS	3	0	0.00	2.0	0.95	0.071
Pesticides	Endosulfan Sulfate	WB	3	0	0.00	0.00	0.00	na
Pesticides	Gamma-Chlordane	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	Gamma-Chlordane	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	Gamma-Chlordane	WB	3	0	1.8	2.0	0.95	0.050
Pesticides	Gamma-Chlordene	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	Gamma-Chlordene	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	Gamma-Chlordene	WB	3	0	1.8	2.0	0.95	0.050
Pesticides	Heptachlor	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	Heptachlor	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	Heptachlor	WB	3	0	1.8	2.0	0.95	0.050
Pesticides	Heptachlor Epoxide	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	Heptachlor Epoxide	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	Heptachlor Epoxide	WB	3	0	1.8	2.0	0.95	0.050
Pesticides	Hexachlorobenzene	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	Hexachlorobenzene	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	Hexachlorobenzene	WB	3	3	1.2	1.2	1.2	2.1E-08
Pesticides	Lindane	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	Lindane	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	Lindane	WB	3	0	1.8	2.0	0.95	0.050
Pesticides	Mirex	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	Mirex	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	Mirex	WB	3	0	1.8	2.0	0.95	0.050
Pesticides	Oxychlordane	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	Oxychlordane	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	Oxychlordane	WB	3	0	1.8	2.0	0.95	0.050
Pesticides	Pentachloroanisol	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	Pentachloroanisol	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	Pentachloroanisol	WB	3	0	1.8	2.0	0.95	0.050
Pesticides	Toxaphene	E	3	0	56	57	28	0.29
Pesticides	Toxaphene	FS	3	0	55	60	29	1.3
Pesticides	Toxaphene	WB	3	0	55	59	29	1.0
Pesticides	trans-Nonachlor	E	3	0	1.9	1.9	0.95	1.5E-08
Pesticides	trans-Nonachlor	FS	3	0	1.8	2.0	0.97	0.058
Pesticides	trans-Nonachlor	WB	3	0	1.8	2.0	0.95	0.050
Semivolatiles	1,2,4-Trichlorobenzene	E	3	0	9.6	10	4.9	0.12
Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	1,2-Diphenylhydrazine	E	3	0	9.6	10	4.9	0.12
Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	2,4-Dinitrotoluene	E	3	0	19	20	9.7	0.23
Semivolatiles	2,4-Dinitrotoluene	FS	3	0	19	150	32	39
Semivolatiles	2,4-Dinitrotoluene	WB	3	0	140	150	74	3.3
Semivolatiles	2,6-Dinitrotoluene	E	3	0	38	40	19	0.46

Appendix D-3: Basin Summary Statistics
Coho Salmon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Semivolatiles	2,6-Dinitrotoluene	FS	3	0	38	39	19	0.20
Semivolatiles	2,6-Dinitrotoluene	WB	3	0	35	39	18	0.85
Semivolatiles	2-Chloronaphthalene	E	3	0	19	20	9.7	0.23
Semivolatiles	2-Chloronaphthalene	FS	3	0	19	19	9.6	0.10
Semivolatiles	2-Chloronaphthalene	WB	3	0	18	19	9.2	0.40
Semivolatiles	4-Bromophenyl-Phenylether	E	3	0	9.6	10	4.9	0.12
Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	4-Chlorophenyl-Phenylether	E	3	0	9.6	10	4.9	0.12
Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	Acenaphthene	E	3	0	19	20	9.7	0.23
Semivolatiles	Acenaphthene	FS	3	0	19	19	9.6	0.10
Semivolatiles	Acenaphthene	WB	3	0	18	19	9.2	0.40
Semivolatiles	Acenaphthylene	E	3	0	9.6	10	4.9	0.12
Semivolatiles	Acenaphthylene	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	Acenaphthylene	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	Anthracene	E	3	0	9.6	10	4.9	0.12
Semivolatiles	Anthracene	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	Anthracene	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	Benzene, 1,2-dichloro-	E	3	0	9.6	10	4.9	0.12
Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	Benzene, 1,3-dichloro-	E	3	0	9.6	10	4.9	0.12
Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	Benzene, 1,4-dichloro-	E	3	0	9.6	10	4.9	0.12
Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	Benzo(a)anthracene	E	3	0	9.6	10	4.9	0.12
Semivolatiles	Benzo(a)anthracene	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	Benzo(a)anthracene	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	Benzo(a)pyrene	E	3	0	9.6	10	4.9	0.12
Semivolatiles	Benzo(a)pyrene	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	Benzo(a)pyrene	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	Benzo(g,h,i)perylene	E	3	0	19	20	9.7	0.23
Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	19	19	9.6	0.10
Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	18	19	9.2	0.40
Semivolatiles	Benzo[b]fluoranthene	E	3	0	9.6	10	4.9	0.12
Semivolatiles	Benzo[b]fluoranthene	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	Benzo[b]fluoranthene	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	Benzo[k]fluoranthene	E	3	0	9.6	10	4.9	0.12
Semivolatiles	Benzo[k]fluoranthene	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	Benzo[k]fluoranthene	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	bis(2-Chloroisopropyl)ether	E	3	0	19	20	9.7	0.23
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	19	19	9.6	0.10
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	18	19	9.2	0.40
Semivolatiles	Chrysene	E	3	0	9.6	10	4.9	0.12
Semivolatiles	Chrysene	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	Chrysene	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	Dibenz[a,h]anthracene	E	3	0	19	20	9.7	0.23
Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	19	19	9.6	0.10
Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	18	19	9.2	0.40
Semivolatiles	Dibenzofuran	E	3	0	9.6	10	4.9	0.12
Semivolatiles	Dibenzofuran	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	Dibenzofuran	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	Fluoranthene	E	3	0	19	20	9.7	0.23
Semivolatiles	Fluoranthene	FS	3	0	19	19	9.6	0.10
Semivolatiles	Fluoranthene	WB	3	0	18	19	9.2	0.40
Semivolatiles	9H-Fluorene	E	3	0	9.6	10	4.9	0.12
Semivolatiles	9H-Fluorene	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	9H-Fluorene	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	Hexachlorobutadiene	E	3	0	9.6	10	4.9	0.12
Semivolatiles	Hexachlorobutadiene	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	Hexachlorobutadiene	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	Hexachloroethane	E	3	0	9.6	10	4.9	0.12
Semivolatiles	Hexachloroethane	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	Hexachloroethane	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	Indeno(1,2,3-cd)pyrene	E	3	0	19	20	9.7	0.23
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	19	19	9.6	0.10
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	18	19	9.2	0.40
Semivolatiles	Naphthalene	E	3	0	21	24	11	0.75
Semivolatiles	Naphthalene	FS	3	0	17	26	11	2.6
Semivolatiles	Naphthalene	WB	3	0	18	19	9.1	0.31
Semivolatiles	Naphthalene, 1-methyl-	E	3	0	9.6	10	4.9	0.12
Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	9.5	9.7	4.8	0.050

Appendix D-3: Basin Summary Statistics
Coho Salmon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	Naphthalene, 2-methyl-	E	3	0	9.6	10	4.9	0.12
Semivolatiles	Naphthalene, 2-methyl-	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	Naphthalene, 2-methyl-	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	Nitrobenzene	E	3	0	9.6	10	4.9	0.12
Semivolatiles	Nitrobenzene	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	Nitrobenzene	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	Phenanthrene	E	3	0	9.6	10	4.9	0.12
Semivolatiles	Phenanthrene	FS	3	0	9.5	9.7	4.8	0.050
Semivolatiles	Phenanthrene	WB	3	0	8.8	9.6	4.6	0.20
Semivolatiles	Pyrene	E	3	0	19	20	9.7	0.23
Semivolatiles	Pyrene	FS	3	0	19	19	9.6	0.10
Semivolatiles	Pyrene	WB	3	0	18	19	9.2	0.40
Semivolatiles	Retene	E	3	0	19	20	9.7	0.23
Semivolatiles	Retene	FS	3	0	19	19	9.6	0.10
Semivolatiles	Retene	WB	3	0	18	19	9.2	0.40

Appendix D-3: Basin Summary Statistics
Fall Chinook Salmon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Dioxin/furans	2,3,7,8-TCDD	E	1	0	0.000040	0.000040	0.000020	na
Dioxin/furans	2,3,7,8-TCDD	FS	15	2	0.000010	0.000050	0.000015	0.0000064
Dioxin/furans	2,3,7,8-TCDD	WB	15	1	0.000010	0.000060	0.000015	0.0000090
Dioxin/furans	1,2,3,7,8-PeCDD	E	1	0	0.000040	0.000040	0.000020	na
Dioxin/furans	1,2,3,7,8-PeCDD	FS	15	2	0.000010	0.00011	0.000026	0.000027
Dioxin/furans	1,2,3,7,8-PeCDD	WB	15	2	0.000010	0.000090	0.000025	0.000025
Dioxin/furans	1,2,3,4,7,8-HxCDD	E	1	0	0.000010	0.000010	0.0000050	na
Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	15	0	0.000010	0.000060	0.000012	0.0000088
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	15	0	0.000010	0.000040	0.000011	0.0000055
Dioxin/furans	1,2,3,6,7,8-HxCDD	E	1	0	0.000010	0.000010	0.0000050	na
Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	15	3	0.000010	0.000060	0.000017	0.000012
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	15	4	0.000010	0.000070	0.000022	0.000022
Dioxin/furans	1,2,3,7,8,9-HxCDD	E	1	0	0.000010	0.000010	0.0000050	na
Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	15	2	0.000010	0.000060	0.000015	0.0000095
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	15	0	0.000010	0.000040	0.000011	0.0000055
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	E	1	1	0.000050	0.000050	0.000050	na
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	15	10	0.000010	0.00013	0.000039	0.000034
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	15	6	0.000010	0.00014	0.000048	0.000046
Dioxin/furans	OCDD	E	1	1	0.00028	0.00028	0.00028	na
Dioxin/furans	OCDD	FS	15	8	0.000010	0.00042	0.00011	0.00013
Dioxin/furans	OCDD	WB	15	3	0.000010	0.00064	0.00011	0.00021
Dioxin/furans	2,3,7,8-TCDF	E	1	1	0.00043	0.00043	0.00043	na
Dioxin/furans	2,3,7,8-TCDF	FS	15	14	0.000030	0.0014	0.00068	0.00030
Dioxin/furans	2,3,7,8-TCDF	WB	15	15	0.00043	0.0014	0.00076	0.00027
Dioxin/furans	1,2,3,7,8-PeCDF	E	1	0	0.000030	0.000030	0.000015	na
Dioxin/furans	1,2,3,7,8-PeCDF	FS	15	1	0.000010	0.000080	0.000016	0.000019
Dioxin/furans	1,2,3,7,8-PeCDF	WB	15	1	0.000010	0.000040	0.000015	0.0000080
Dioxin/furans	2,3,4,7,8-PeCDF	E	1	0	0.000030	0.000030	0.000015	na
Dioxin/furans	2,3,4,7,8-PeCDF	FS	15	5	0.000010	0.00016	0.000039	0.000046
Dioxin/furans	2,3,4,7,8-PeCDF	WB	15	5	0.000020	0.00015	0.000045	0.000048
Dioxin/furans	1,2,3,4,7,8-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	15	0	0.000010	0.000060	0.000013	0.0000075
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	15	0	0.000010	0.000050	0.000011	0.0000060
Dioxin/furans	1,2,3,6,7,8-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	15	0	0.000010	0.000060	0.000013	0.0000075
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	15	0	0.000010	0.000050	0.000011	0.0000060
Dioxin/furans	1,2,3,7,8,9-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	15	0	0.000010	0.000060	0.000013	0.0000075
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	15	0	0.000010	0.000050	0.000011	0.0000060
Dioxin/furans	2,3,4,6,7,8-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	15	0	0.000010	0.000060	0.000013	0.0000075
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	15	0	0.000010	0.000050	0.000011	0.0000060
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	E	1	0	0.000020	0.000020	0.000010	na
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	15	0	0.000010	0.000050	0.0000092	0.0000056
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	15	1	0.000010	0.00012	0.000016	0.000029
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	E	1	0	0.000020	0.000020	0.000010	na
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	15	0	0.000010	0.000050	0.0000092	0.0000056
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	15	0	0.000010	0.000030	0.0000090	0.0000039
Dioxin/furans	OCDF	E	1	0	0.000050	0.000050	0.000025	na
Dioxin/furans	OCDF	FS	15	1	0.000020	0.00017	0.000033	0.000033
Dioxin/furans	OCDF	WB	15	0	0.000020	0.00010	0.000030	0.000012
Guaiacols/Phenols	4-Chloroguaiacol	E	1	0	960	960	480	na
Guaiacols/Phenols	4-Chloroguaiacol	FS	15	0	870	1,000	470	20
Guaiacols/Phenols	4-Chloroguaiacol	WB	15	0	870	990	470	19
Guaiacols/Phenols	3,4-Dichloroguaiacol	E	1	0	960	960	480	na
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	15	0	870	1,000	470	20
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	15	0	870	990	470	19
Guaiacols/Phenols	4,5-Dichloroguaiacol	E	1	0	960	960	480	na
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	15	0	870	1,000	470	20
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	15	0	870	990	470	19
Guaiacols/Phenols	4,6-Dichloroguaiacol	E	1	0	960	960	480	na
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	15	0	870	1,000	470	20
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	15	0	870	990	470	19
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	E	1	0	960	960	480	na
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	15	0	870	1,000	470	20
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	15	0	870	990	470	19
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	E	1	0	390	390	190	na
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	15	0	350	400	190	7.9
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	15	0	350	400	190	7.8
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	E	1	0	960	960	480	na
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	15	0	870	1,000	470	20
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	15	0	870	990	470	19
Guaiacols/Phenols	Tetrachloroguaiacol	E	1	0	390	390	190	na
Guaiacols/Phenols	Tetrachloroguaiacol	FS	15	0	350	400	190	7.9
Guaiacols/Phenols	Tetrachloroguaiacol	WB	15	0	350	400	190	7.8
Guaiacols/Phenols	2-Chlorophenol	E	1	0	390	390	190	na

Appendix D-3: Basin Summary Statistics
Fall Chinook Salmon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Guaiacols/Phenols	2-Chlorophenol	FS	15	0	350	400	190	7.9
Guaiacols/Phenols	2-Chlorophenol	WB	15	0	350	400	190	7.8
Guaiacols/Phenols	4-Chloro-3-methylphenol	E	1	0	390	390	190	na
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	15	0	350	400	190	7.9
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	15	0	350	400	190	7.8
Guaiacols/Phenols	2,4-Dichlorophenol	E	1	0	390	390	190	na
Guaiacols/Phenols	2,4-Dichlorophenol	FS	15	0	350	400	190	7.9
Guaiacols/Phenols	2,4-Dichlorophenol	WB	15	0	350	400	190	7.8
Guaiacols/Phenols	2,4-Dimethylphenol	E	1	0	960	960	480	na
Guaiacols/Phenols	2,4-Dimethylphenol	FS	15	0	870	1,000	470	20
Guaiacols/Phenols	2,4-Dimethylphenol	WB	15	0	870	990	470	19
Guaiacols/Phenols	2,4,5-Trichlorophenol	E	1	0	390	390	190	na
Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	15	0	350	400	190	7.9
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	15	0	350	400	190	7.8
Guaiacols/Phenols	2,4,6-Trichlorophenol	E	1	0	390	390	190	na
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	15	0	350	400	190	7.9
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	15	0	350	400	190	7.8
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	E	1	0	390	390	190	na
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	15	0	350	400	190	7.9
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	15	0	350	400	190	7.8
Guaiacols/Phenols	Pentachlorophenol	E	1	0	390	390	190	na
Guaiacols/Phenols	Pentachlorophenol	FS	15	0	350	400	190	7.9
Guaiacols/Phenols	Pentachlorophenol	WB	15	0	350	400	190	7.8
Guaiacols/Phenols	Phenol	E	1	0	390	390	190	na
Guaiacols/Phenols	Phenol	FS	15	0	350	450	190	12
Guaiacols/Phenols	Phenol	WB	15	0	350	400	190	7.8
Metals	Aluminum	E	1	0	1,000	1,000	500	na
Metals	Aluminum	FS	15	3	1,000	1,500	630	280
Metals	Aluminum	WB	15	1	630	1,000	510	34
Metals	Antimony	E	1	0	50	50	25	na
Metals	Antimony	FS	15	0	50	50	25	0.00
Metals	Antimony	WB	15	0	50	50	25	0.00
Metals	Arsenic	E	1	1	240	240	240	na
Metals	Arsenic	FS	15	15	530	1,100	810	170
Metals	Arsenic	WB	15	15	610	1,000	860	110
Metals	Barium	E	1	0	200	200	100	na
Metals	Barium	FS	15	2	200	340	130	84
Metals	Barium	WB	15	1	200	250	110	39
Metals	Beryllium	E	1	0	4.0	4.0	2.0	na
Metals	Beryllium	FS	15	0	4.0	4.0	2.0	0.00
Metals	Beryllium	WB	15	0	4.0	4.0	2.0	0.00
Metals	Cadmium	E	1	0	4.0	4.0	2.0	na
Metals	Cadmium	FS	15	0	4.0	4.0	2.0	0.00
Metals	Cadmium	WB	15	15	4.6	10	6.1	1.5
Metals	Chromium	E	1	0	100	100	50	na
Metals	Chromium	FS	15	2	100	300	71	66
Metals	Chromium	WB	15	9	100	180	100	49
Metals	Cobalt	E	1	1	35	35	35	na
Metals	Cobalt	FS	15	15	2.9	400	47	100
Metals	Cobalt	WB	15	15	75	220	140	44
Metals	Copper	E	1	1	5,800	5,800	5,800	na
Metals	Copper	FS	15	15	540	760	640	67
Metals	Copper	WB	15	15	1,000	14,000	3,400	3,400
Metals	Lead	E	1	0	10	10	5.0	na
Metals	Lead	FS	15	4	10	16	6.9	3.4
Metals	Lead	WB	15	15	11	1,200	220	300
Metals	Manganese	E	1	1	960	960	960	na
Metals	Manganese	FS	15	15	72	110	87	13
Metals	Manganese	WB	15	15	240	390	320	47
Metals	Mercury	E	1	0	50	50	25	na
Metals	Mercury	FS	15	14	50	150	84	30
Metals	Mercury	WB	15	9	50	200	77	61
Metals	Nickel	E	1	1	54	54	54	na
Metals	Nickel	FS	15	9	30	320	75	91
Metals	Nickel	WB	15	15	63	240	130	55
Metals	Selenium	E	1	1	2,400	2,400	2,400	na
Metals	Selenium	FS	15	15	280	380	330	41
Metals	Selenium	WB	15	14	380	570	470	83
Metals	Silver	E	1	0	100	100	50	na
Metals	Silver	FS	15	0	100	100	50	0.00
Metals	Silver	WB	15	0	100	100	50	0.00
Metals	Thallium	E	1	0	50	50	25	na
Metals	Thallium	FS	15	0	50	50	25	0.00
Metals	Thallium	WB	15	0	50	50	25	0.00
Metals	Vanadium	E	1	1	19	19	19	na
Metals	Vanadium	FS	15	2	10	11	5.6	1.7

Appendix D-3: Basin Summary Statistics
Fall Chinook Salmon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Metals	Vanadium	WB	15	15	16	47	24	7.6
Metals	Zinc	E	1	1	36,000	36,000	36,000	na
Metals	Zinc	FS	15	15	5,600	8,000	6,700	800
Metals	Zinc	WB	15	15	21,000	34,000	27,000	3,700
PCBs	Aroclor 1016	E	1	0	19	19	9.5	na
PCBs	Aroclor 1016	FS	15	0	19	20	9.9	0.23
PCBs	Aroclor 1016	WB	15	0	19	20	9.8	0.26
PCBs	Aroclor 1221	E	1	0	19	19	9.5	na
PCBs	Aroclor 1221	FS	15	0	19	20	9.9	0.23
PCBs	Aroclor 1221	WB	15	0	19	20	9.8	0.26
PCBs	Aroclor 1232	E	1	0	19	19	9.5	na
PCBs	Aroclor 1232	FS	15	0	19	20	9.9	0.23
PCBs	Aroclor 1232	WB	15	0	19	20	9.8	0.26
PCBs	Aroclor 1242	E	1	0	19	19	9.5	na
PCBs	Aroclor 1242	FS	15	0	19	20	9.9	0.23
PCBs	Aroclor 1242	WB	15	0	19	20	9.8	0.26
PCBs	Aroclor 1248	E	1	0	19	19	9.5	na
PCBs	Aroclor 1248	FS	15	0	19	20	9.9	0.23
PCBs	Aroclor 1248	WB	15	0	19	20	9.8	0.26
PCBs	Aroclor 1254	E	1	1	12	12	12	na
PCBs	Aroclor 1254	FS	15	15	8.6	35	17	6.9
PCBs	Aroclor 1254	WB	15	15	10	47	20	9.4
PCBs	Aroclor 1260	E	1	0	19	19	9.5	na
PCBs	Aroclor 1260	FS	15	0	19	20	9.9	0.23
PCBs	Aroclor 1260	WB	15	0	19	20	9.8	0.26
PCBs	PCB 77	E	1	1	0.0046	0.0046	0.0046	na
PCBs	PCB 77	FS	15	15	0.0041	0.057	0.014	0.016
PCBs	PCB 77	WB	15	15	0.0051	0.049	0.015	0.015
PCBs	PCB 105	E	1	1	0.11	0.11	0.11	na
PCBs	PCB 105	FS	15	15	0.080	0.63	0.24	0.15
PCBs	PCB 105	WB	15	15	0.11	0.66	0.28	0.19
PCBs	PCB 114	E	1	1	0.0098	0.0098	0.0098	na
PCBs	PCB 114	FS	15	15	0.0083	0.045	0.020	0.0095
PCBs	PCB 114	WB	15	15	0.011	0.053	0.024	0.014
PCBs	PCB 118	E	1	1	0.25	0.25	0.25	na
PCBs	PCB 118	FS	15	15	0.20	1.3	0.53	0.30
PCBs	PCB 118	WB	15	15	0.27	1.5	0.61	0.39
PCBs	PCB 123	E	1	1	0.0049	0.0049	0.0049	na
PCBs	PCB 123	FS	15	15	0.0033	0.015	0.0082	0.0034
PCBs	PCB 123	WB	15	15	0.0050	0.014	0.0088	0.0031
PCBs	PCB 126	E	1	0	0.00050	0.00050	0.00025	na
PCBs	PCB 126	FS	15	10	0.00050	0.0036	0.0014	0.0011
PCBs	PCB 126	WB	15	9	0.00050	0.0047	0.0016	0.0016
PCBs	PCB 156	E	1	1	0.012	0.012	0.012	na
PCBs	PCB 156	FS	15	15	0.016	0.073	0.040	0.017
PCBs	PCB 156	WB	15	15	0.019	0.20	0.054	0.046
PCBs	PCB 157	E	1	1	0.0043	0.0043	0.0043	na
PCBs	PCB 157	FS	15	15	0.0041	0.018	0.010	0.0040
PCBs	PCB 157	WB	15	15	0.0053	0.045	0.014	0.010
PCBs	PCB 167	E	1	1	0.0099	0.0099	0.0099	na
PCBs	PCB 167	FS	15	15	0.010	0.036	0.023	0.0069
PCBs	PCB 167	WB	15	15	0.013	0.078	0.026	0.017
PCBs	PCB 169	E	1	0	0.0010	0.0010	0.00050	na
PCBs	PCB 169	FS	15	0	0.0010	0.0010	0.00050	0.00
PCBs	PCB 169	WB	15	0	0.0010	0.0012	0.00051	0.000027
PCBs	PCB 170	E	1	1	0.029	0.029	0.029	na
PCBs	PCB 170	FS	15	15	0.038	0.13	0.080	0.026
PCBs	PCB 170	WB	15	15	0.044	0.35	0.095	0.080
PCBs	PCB 180	E	1	1	0.095	0.095	0.095	na
PCBs	PCB 180	FS	15	15	0.12	0.42	0.26	0.086
PCBs	PCB 180	WB	15	15	0.14	1.2	0.30	0.26
PCBs	PCB 189	E	1	0	0.0010	0.0010	0.00050	na
PCBs	PCB 189	FS	15	13	0.0010	0.0052	0.0029	0.0014
PCBs	PCB 189	WB	15	11	0.0010	0.014	0.0032	0.0035
Pesticides	Aldrin	E	1	0	1.9	1.9	0.95	na
Pesticides	Aldrin	FS	15	0	1.9	2.0	0.99	0.023
Pesticides	Aldrin	WB	15	0	1.9	2.0	0.98	0.026
Pesticides	Alpha-BHC	E	1	0	1.9	1.9	0.95	na
Pesticides	Alpha-BHC	FS	15	0	1.9	2.0	0.99	0.023
Pesticides	Alpha-BHC	WB	15	0	1.9	2.0	0.98	0.026
Pesticides	Alpha-Chlordene	E	1	0	1.9	1.9	0.95	na
Pesticides	Alpha-Chlordene	FS	15	0	1.9	2.0	0.99	0.023
Pesticides	Alpha-Chlordene	WB	15	0	1.9	2.0	0.98	0.026
Pesticides	Beta-BHC	E	1	0	1.9	1.9	0.95	na
Pesticides	Beta-BHC	FS	15	0	1.9	2.0	0.99	0.023
Pesticides	Beta-BHC	WB	15	0	1.9	2.0	0.98	0.026

Appendix D-3: Basin Summary Statistics
Fall Chinook Salmon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Pesticides	cis-Chlordane (alpha-Chlordane)	E	1	1	1.7	1.7	1.7	na
Pesticides	cis-Chlordane (alpha-Chlordane)	FS	15	2	1.2	2.0	1.0	0.19
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	15	7	1.2	2.3	1.3	0.41
Pesticides	cis-Nonachlor	E	1	0	1.9	1.9	0.95	na
Pesticides	cis-Nonachlor	FS	15	1	1.2	2.0	1.0	0.059
Pesticides	cis-Nonachlor	WB	15	2	1.2	2.0	1.0	0.10
Pesticides	DDD-o,p'	E	1	0	1.9	1.9	0.95	na
Pesticides	DDD-o,p'	FS	15	0	1.9	2.0	0.99	0.023
Pesticides	DDD-o,p'	WB	15	4	0.96	2.0	1.0	0.15
Pesticides	DDE-o,p'	E	1	0	1.9	1.9	0.95	na
Pesticides	DDE-o,p'	FS	15	0	1.9	2.0	0.99	0.023
Pesticides	DDE-o,p'	WB	15	0	1.9	2.0	0.98	0.026
Pesticides	DDT-o,p'	E	1	0	1.9	1.9	0.95	na
Pesticides	DDT-o,p'	FS	15	0	1.9	2.0	0.99	0.023
Pesticides	DDT-o,p'	WB	15	0	1.9	2.0	0.98	0.026
Pesticides	DDD-p,p'	E	1	1	3.7	3.7	3.7	na
Pesticides	DDD-p,p'	FS	15	14	1.8	6.1	3.3	1.5
Pesticides	DDD-p,p'	WB	15	15	1.4	8.2	4.0	2.1
Pesticides	DDE-p,p'	E	1	1	6.6	6.6	6.6	na
Pesticides	DDE-p,p'	FS	15	15	4.2	26	12	6.8
Pesticides	DDE-p,p'	WB	15	15	4.5	53	15	13
Pesticides	DDT-p,p'	E	1	0	1.9	1.9	0.95	na
Pesticides	DDT-p,p'	FS	15	9	1.8	6.5	2.5	1.8
Pesticides	DDT-p,p'	WB	15	7	1.9	7.7	2.6	2.4
Pesticides	DDMU	E	1	0	1.9	1.9	0.95	na
Pesticides	DDMU	FS	15	2	1.2	2.0	1.0	0.12
Pesticides	DDMU	WB	15	2	1.4	2.4	1.1	0.38
Pesticides	Delta-BHC	E	1	0	1.9	1.9	0.95	na
Pesticides	Delta-BHC	FS	15	0	1.9	2.0	0.99	0.023
Pesticides	Delta-BHC	WB	15	0	1.9	2.0	0.98	0.026
Pesticides	Endosulfan Sulfate	E	1	0	1.9	1.9	0.95	na
Pesticides	Endosulfan Sulfate	FS	15	0	1.9	2.0	0.98	0.029
Pesticides	Endosulfan Sulfate	WB	14	0	1.9	2.0	0.98	0.029
Pesticides	Gamma-Chlordane	E	1	0	1.9	1.9	0.95	na
Pesticides	Gamma-Chlordane	FS	15	0	1.9	2.0	0.99	0.023
Pesticides	Gamma-Chlordane	WB	15	0	1.9	2.0	0.98	0.026
Pesticides	gamma-Chlordene	E	1	0	1.9	1.9	0.95	na
Pesticides	gamma-Chlordene	FS	15	0	1.9	2.0	0.99	0.023
Pesticides	gamma-Chlordene	WB	15	0	1.9	2.0	0.98	0.026
Pesticides	Heptachlor	E	1	0	1.9	1.9	0.95	na
Pesticides	Heptachlor	FS	15	0	1.9	2.0	0.99	0.023
Pesticides	Heptachlor	WB	15	0	1.9	2.0	0.98	0.026
Pesticides	Heptachlor Epoxide	E	1	0	1.9	1.9	0.95	na
Pesticides	Heptachlor Epoxide	FS	15	0	1.9	2.0	0.99	0.023
Pesticides	Heptachlor Epoxide	WB	14	0	1.9	2.0	0.97	0.026
Pesticides	Hexachlorobenzene	E	1	1	4.3	4.3	4.3	na
Pesticides	Hexachlorobenzene	FS	15	15	1.1	3.4	2.1	0.58
Pesticides	Hexachlorobenzene	WB	15	15	2.0	4.5	3.0	0.55
Pesticides	Lindane	E	1	0	1.9	1.9	0.95	na
Pesticides	Lindane	FS	15	0	1.9	2.0	0.99	0.023
Pesticides	Lindane	WB	15	0	1.9	2.0	0.98	0.026
Pesticides	Mirex	E	1	0	1.9	1.9	0.95	na
Pesticides	Mirex	FS	15	0	1.9	2.0	0.99	0.023
Pesticides	Mirex	WB	15	0	1.9	2.0	0.98	0.026
Pesticides	Oxychlordane	E	1	0	1.9	1.9	0.95	na
Pesticides	Oxychlordane	FS	15	0	1.9	2.0	0.99	0.023
Pesticides	Oxychlordane	WB	15	0	1.9	2.0	0.98	0.026
Pesticides	Pentachloroanisol	E	1	0	1.9	1.9	0.95	na
Pesticides	Pentachloroanisol	FS	15	0	1.9	2.0	0.99	0.023
Pesticides	Pentachloroanisol	WB	15	0	1.9	2.0	0.98	0.026
Pesticides	Toxaphene	E	1	0	58	58	29	na
Pesticides	Toxaphene	FS	15	0	57	60	29	0.50
Pesticides	Toxaphene	WB	15	0	56	60	29	0.65
Pesticides	trans-Nonachlor	E	1	1	2.9	2.9	2.9	na
Pesticides	trans-Nonachlor	FS	15	14	1.9	4.4	2.9	0.94
Pesticides	trans-Nonachlor	WB	15	15	2.0	6.5	3.4	1.2
Semivolatiles	1,2,4-Trichlorobenzene	E	1	0	9.6	9.6	4.8	na
Semivolatiles	1,2,4-Trichlorobenzene	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	1,2,4-Trichlorobenzene	WB	15	0	8.7	9.9	4.7	0.20
Semivolatiles	1,2-Diphenylhydrazine	E	1	0	9.6	9.6	4.8	na
Semivolatiles	1,2-Diphenylhydrazine	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	1,2-Diphenylhydrazine	WB	15	0	8.7	9.9	4.7	0.20
Semivolatiles	2,4-Dinitrotoluene	E	1	0	19	19	9.6	na
Semivolatiles	2,4-Dinitrotoluene	FS	15	0	18	160	49	33
Semivolatiles	2,4-Dinitrotoluene	WB	15	0	19	160	35	32
Semivolatiles	2,6-Dinitrotoluene	E	1	0	38	38	19	na

Appendix D-3: Basin Summary Statistics
Fall Chinook Salmon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Semivolatiles	2,6-Dinitrotoluene	FS	15	0	35	40	19	0.79
Semivolatiles	2,6-Dinitrotoluene	WB	15	0	35	40	19	0.78
Semivolatiles	2-Chloronaphthalene	E	1	0	19	19	9.6	na
Semivolatiles	2-Chloronaphthalene	FS	15	0	17	20	9.5	0.40
Semivolatiles	2-Chloronaphthalene	WB	15	0	18	20	9.4	0.39
Semivolatiles	4-Bromophenyl-Phenylether	E	1	0	9.6	9.6	4.8	na
Semivolatiles	4-Bromophenyl-Phenylether	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	4-Bromophenyl-Phenylether	WB	15	0	8.7	9.9	4.7	0.20
Semivolatiles	4-Chlorophenyl-Phenylether	E	1	0	9.6	9.6	4.8	na
Semivolatiles	4-Chlorophenyl-Phenylether	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	4-Chlorophenyl-Phenylether	WB	15	0	8.7	9.9	4.7	0.20
Semivolatiles	Acenaphthene	E	1	0	19	19	9.6	na
Semivolatiles	Acenaphthene	FS	15	0	17	20	9.5	0.40
Semivolatiles	Acenaphthene	WB	15	0	18	20	9.4	0.39
Semivolatiles	Acenaphthylene	E	1	0	9.6	9.6	4.8	na
Semivolatiles	Acenaphthylene	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	Acenaphthylene	WB	15	0	8.7	9.9	4.7	0.20
Semivolatiles	Anthracene	E	1	0	9.6	9.6	4.8	na
Semivolatiles	Anthracene	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	Anthracene	WB	15	0	8.7	9.9	4.7	0.20
Semivolatiles	Benzene, 1,2-dichloro-	E	1	0	9.6	9.6	4.8	na
Semivolatiles	Benzene, 1,2-dichloro-	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	Benzene, 1,2-dichloro-	WB	15	0	8.7	9.9	4.7	0.20
Semivolatiles	Benzene, 1,3-dichloro-	E	1	0	9.6	9.6	4.8	na
Semivolatiles	Benzene, 1,3-dichloro-	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	Benzene, 1,3-dichloro-	WB	15	0	8.7	9.9	4.7	0.20
Semivolatiles	Benzene, 1,4-dichloro-	E	1	0	9.6	9.6	4.8	na
Semivolatiles	Benzene, 1,4-dichloro-	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	Benzene, 1,4-dichloro-	WB	15	0	8.7	9.9	4.7	0.20
Semivolatiles	Benzo(a)anthracene	E	1	0	9.6	9.6	4.8	na
Semivolatiles	Benzo(a)anthracene	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	Benzo(a)anthracene	WB	15	0	8.7	9.9	4.7	0.20
Semivolatiles	Benzo(a)pyrene	E	1	0	9.6	9.6	4.8	na
Semivolatiles	Benzo(a)pyrene	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	Benzo(a)pyrene	WB	15	0	8.7	9.9	4.7	0.20
Semivolatiles	Benzo(g,h,i)perylene	E	1	0	19	19	9.6	na
Semivolatiles	Benzo(g,h,i)perylene	FS	15	0	17	20	9.5	0.40
Semivolatiles	Benzo(g,h,i)perylene	WB	15	0	18	20	9.4	0.39
Semivolatiles	Benzo[b]Fluoranthene	E	1	0	9.6	9.6	4.8	na
Semivolatiles	Benzo[b]Fluoranthene	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	Benzo[b]Fluoranthene	WB	15	0	8.7	9.9	4.7	0.20
Semivolatiles	Benzo[k]fluoranthene	E	1	0	9.6	9.6	4.8	na
Semivolatiles	Benzo[k]fluoranthene	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	Benzo[k]fluoranthene	WB	15	0	8.7	9.9	4.7	0.20
Semivolatiles	bis(2-Chloroisopropyl)ether	E	1	0	19	19	9.6	na
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	15	0	17	20	9.5	0.40
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	15	0	18	20	9.4	0.39
Semivolatiles	Chrysene	E	1	0	9.6	9.6	4.8	na
Semivolatiles	Chrysene	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	Chrysene	WB	15	0	8.7	9.9	4.7	0.20
Semivolatiles	Dibenz[a,h]anthracene	E	1	0	19	19	9.6	na
Semivolatiles	Dibenz[a,h]anthracene	FS	15	0	17	20	9.5	0.40
Semivolatiles	Dibenz[a,h]anthracene	WB	15	0	18	20	9.4	0.39
Semivolatiles	Dibenzofuran	E	1	0	9.6	9.6	4.8	na
Semivolatiles	Dibenzofuran	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	Dibenzofuran	WB	15	0	8.7	9.9	4.7	0.20
Semivolatiles	Fluoranthene	E	1	0	19	19	9.6	na
Semivolatiles	Fluoranthene	FS	15	0	17	20	9.5	0.40
Semivolatiles	Fluoranthene	WB	15	0	18	20	9.4	0.39
Semivolatiles	9H-Fluorene	E	1	0	9.6	9.6	4.8	na
Semivolatiles	9H-Fluorene	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	9H-Fluorene	WB	15	0	8.7	9.9	4.7	0.20
Semivolatiles	Hexachlorobutadiene	E	1	0	9.6	9.6	4.8	na
Semivolatiles	Hexachlorobutadiene	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	Hexachlorobutadiene	WB	15	0	8.7	9.9	4.7	0.20
Semivolatiles	Hexachloroethane	E	1	0	9.6	9.6	4.8	na
Semivolatiles	Hexachloroethane	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	Hexachloroethane	WB	15	0	8.7	9.9	4.7	0.20
Semivolatiles	Indeno(1,2,3-cd)pyrene	E	1	0	19	19	9.6	na
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	15	0	17	20	9.5	0.40
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	15	0	18	20	9.4	0.39
Semivolatiles	Naphthalene	E	1	0	44	44	22	na
Semivolatiles	Naphthalene	FS	15	0	13	40	11	3.7
Semivolatiles	Naphthalene	WB	15	0	12	40	12	4.2
Semivolatiles	Naphthalene, 1-methyl-	E	1	0	9.6	9.6	4.8	na
Semivolatiles	Naphthalene, 1-methyl-	FS	15	0	8.7	10	4.8	0.21

Appendix D-3: Basin Summary Statistics
Fall Chinook Salmon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Semivolatiles	Naphthalene, 1-methyl-	WB	15	0	8.7	10	4.7	0.23
Semivolatiles	Naphthalene, 2-methyl-	E	1	0	9.6	9.6	4.8	na
Semivolatiles	Naphthalene, 2-methyl-	FS	15	0	8.7	21	5.2	1.5
Semivolatiles	Naphthalene, 2-methyl-	WB	15	0	8.7	14	4.8	0.58
Semivolatiles	Nitrobenzene	E	1	0	9.6	9.6	4.8	na
Semivolatiles	Nitrobenzene	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	Nitrobenzene	WB	15	0	8.7	13	4.8	0.48
Semivolatiles	Phenanthrene	E	1	0	9.6	9.6	4.8	na
Semivolatiles	Phenanthrene	FS	15	0	8.7	10	4.7	0.20
Semivolatiles	Phenanthrene	WB	15	0	8.7	11	4.8	0.24
Semivolatiles	Pyrene	E	1	0	19	19	9.6	na
Semivolatiles	Pyrene	FS	15	0	17	20	9.5	0.40
Semivolatiles	Pyrene	WB	15	0	18	20	9.4	0.39
Semivolatiles	Retene	E	1	0	19	19	9.6	na
Semivolatiles	Retene	FS	15	0	17	20	9.5	0.40
Semivolatiles	Retene	WB	15	0	18	20	9.4	0.39

Appendix D-3: Basin Summary Statistics
Spring Chinook Salmon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Dioxin/furans	2,3,7,8-TCDD	E	6	2	0.000010	0.000040	0.000020	0.000014
Dioxin/furans	2,3,7,8-TCDD	FS	24	6	0.000010	0.000050	0.000017	0.000013
Dioxin/furans	2,3,7,8-TCDD	WB	24	4	0.000010	0.00010	0.000016	0.000014
Dioxin/furans	1,2,3,7,8-PeCDD	E	6	4	0.000010	0.00015	0.000088	0.000066
Dioxin/furans	1,2,3,7,8-PeCDD	FS	24	14	0.000010	0.00018	0.000063	0.000053
Dioxin/furans	1,2,3,7,8-PeCDD	WB	24	11	0.000010	0.00038	0.000079	0.000096
Dioxin/furans	1,2,3,4,7,8-HxCDD	E	6	3	0.000010	0.00012	0.000046	0.000051
Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	24	11	0.000010	0.00013	0.000022	0.000026
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	24	9	0.000010	0.00019	0.000041	0.000054
Dioxin/furans	1,2,3,6,7,8-HxCDD	E	6	3	0.000010	0.000090	0.000039	0.000032
Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	24	19	0.000010	0.00012	0.000064	0.000035
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	24	15	0.000010	0.00025	0.000062	0.000054
Dioxin/furans	1,2,3,7,8,9-HxCDD	E	6	3	0.000010	0.000060	0.000027	0.000012
Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	24	13	0.000010	0.000060	0.000027	0.000019
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	24	15	0.000010	0.00012	0.000040	0.000028
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	E	6	4	0.000010	0.00014	0.000090	0.000050
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	24	20	0.000020	0.00057	0.00012	0.00011
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	24	19	0.000010	0.00043	0.00013	0.000089
Dioxin/furans	OCDD	E	6	6	0.00024	0.00057	0.00038	0.00011
Dioxin/furans	OCDD	FS	24	16	0.000020	0.0027	0.00030	0.00054
Dioxin/furans	OCDD	WB	24	21	0.000010	0.00095	0.00031	0.00020
Dioxin/furans	2,3,7,8-TCDF	E	6	6	0.00036	0.00065	0.00052	0.00011
Dioxin/furans	2,3,7,8-TCDF	FS	24	24	0.00044	0.00074	0.00062	0.000082
Dioxin/furans	2,3,7,8-TCDF	WB	24	24	0.00057	0.0011	0.00074	0.00013
Dioxin/furans	1,2,3,7,8-PeCDF	E	6	1	0.000020	0.000080	0.000025	0.000020
Dioxin/furans	1,2,3,7,8-PeCDF	FS	24	21	0.000020	0.00018	0.00010	0.000043
Dioxin/furans	1,2,3,7,8-PeCDF	WB	24	18	0.000010	0.00036	0.000099	0.000076
Dioxin/furans	2,3,4,7,8-PeCDF	E	6	3	0.000020	0.00010	0.000053	0.000038
Dioxin/furans	2,3,4,7,8-PeCDF	FS	24	20	0.000020	0.00018	0.00012	0.000057
Dioxin/furans	2,3,4,7,8-PeCDF	WB	24	20	0.000030	0.00026	0.00015	0.000067
Dioxin/furans	1,2,3,4,7,8-HxCDF	E	6	0	0.000010	0.00019	0.000025	0.000035
Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	24	6	0.000010	0.000060	0.000017	0.000012
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	24	10	0.000010	0.00015	0.000029	0.000031
Dioxin/furans	1,2,3,6,7,8-HxCDF	E	6	2	0.000020	0.00019	0.000030	0.000032
Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	24	19	0.000010	0.000060	0.000031	0.000014
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	24	13	0.000010	0.00013	0.000031	0.000027
Dioxin/furans	1,2,3,7,8,9-HxCDF	E	6	0	0.000010	0.00019	0.000025	0.000035
Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	24	3	0.000010	0.000070	0.000016	0.000019
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	24	7	0.000010	0.000080	0.000023	0.000024
Dioxin/furans	2,3,4,6,7,8-HxCDF	E	6	4	0.000020	0.00019	0.000091	0.000058
Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	24	12	0.000010	0.00016	0.000044	0.000047
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	24	13	0.000010	0.00034	0.000059	0.000080
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	E	6	2	0.000020	0.000090	0.000033	0.000022
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	24	9	0.000010	0.00020	0.000030	0.000040
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	24	15	0.000010	0.00020	0.000053	0.000045
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	E	6	0	0.000010	0.000090	0.000017	0.000014
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	24	5	0.000010	0.000080	0.000018	0.000015
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	24	3	0.000010	0.000090	0.000019	0.000020
Dioxin/furans	OCDF	E	6	1	0.000030	0.00016	0.000033	0.000025
Dioxin/furans	OCDF	FS	24	5	0.000010	0.00021	0.000040	0.000045
Dioxin/furans	OCDF	WB	24	9	0.000010	0.00023	0.000051	0.000058
Guaiacols/Phenols	4-Chloroguaiacol	E	6	0	750	2,500	590	320
Guaiacols/Phenols	4-Chloroguaiacol	FS	24	0	460	2,500	460	190
Guaiacols/Phenols	4-Chloroguaiacol	WB	24	0	490	2,500	530	280
Guaiacols/Phenols	3,4-Dichloroguaiacol	E	6	0	750	2,500	590	320
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	24	0	460	2,500	460	190
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	24	0	490	2,500	530	280
Guaiacols/Phenols	4,5-Dichloroguaiacol	E	6	0	750	2,500	590	320
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	24	0	460	2,500	460	190
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	24	0	490	2,500	530	280
Guaiacols/Phenols	4,6-Dichloroguaiacol	E	6	0	750	2,500	590	320
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	24	0	460	2,500	460	190
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	24	0	490	2,500	530	280
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	E	6	0	750	2,500	590	320
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	24	0	460	2,500	460	190
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	24	0	490	2,500	530	280
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	E	6	0	300	990	240	130
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	24	0	190	980	180	75
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	24	0	190	990	210	110
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	E	6	0	750	2,500	590	320
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	24	0	460	2,500	460	190
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	24	0	490	2,500	530	280
Guaiacols/Phenols	Tetrachloroguaiacol	E	6	0	300	990	240	130
Guaiacols/Phenols	Tetrachloroguaiacol	FS	24	0	190	980	180	75
Guaiacols/Phenols	Tetrachloroguaiacol	WB	24	0	190	990	210	110
Guaiacols/Phenols	2-Chlorophenol	E	6	0	300	990	240	130

Appendix D-3: Basin Summary Statistics
Spring Chinook Salmon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Guaiacols/Phenols	2-Chlorophenol	FS	24	0	190	980	180	75
Guaiacols/Phenols	2-Chlorophenol	WB	24	0	190	990	210	110
Guaiacols/Phenols	4-Chloro-3-methylphenol	E	6	0	300	990	240	130
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	24	0	190	980	180	75
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	24	0	190	990	210	110
Guaiacols/Phenols	2,4-Dichlorophenol	E	6	0	300	990	240	130
Guaiacols/Phenols	2,4-Dichlorophenol	FS	24	0	190	980	180	75
Guaiacols/Phenols	2,4-Dichlorophenol	WB	24	0	190	990	210	110
Guaiacols/Phenols	2,4-Dimethylphenol	E	6	0	750	2,500	590	320
Guaiacols/Phenols	2,4-Dimethylphenol	FS	24	0	460	2,500	460	190
Guaiacols/Phenols	2,4-Dimethylphenol	WB	24	0	490	2,500	530	280
Guaiacols/Phenols	2,4,5-Trichlorophenol	E	6	0	300	990	240	130
Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	24	0	190	980	180	75
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	24	0	190	990	210	110
Guaiacols/Phenols	2,4,6-Trichlorophenol	E	6	0	300	990	240	130
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	24	0	190	980	180	75
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	24	0	190	990	210	110
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	E	6	0	300	990	240	130
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	24	0	190	980	180	75
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	24	0	190	990	210	110
Guaiacols/Phenols	Pentachlorophenol	E	6	0	300	990	240	130
Guaiacols/Phenols	Pentachlorophenol	FS	24	0	190	980	180	75
Guaiacols/Phenols	Pentachlorophenol	WB	24	0	190	990	210	110
Guaiacols/Phenols	Phenol	E	6	0	300	990	240	130
Guaiacols/Phenols	Phenol	FS	24	0	190	980	190	75
Guaiacols/Phenols	Phenol	WB	24	0	190	990	220	110
Metals	Aluminum	E	6	1	1,000	5,000	950	810
Metals	Aluminum	FS	24	8	1,000	2,500	790	490
Metals	Aluminum	WB	24	3	1,000	1,700	610	310
Metals	Antimony	E	6	0	50	250	42	41
Metals	Antimony	FS	24	0	50	50	25	0.00
Metals	Antimony	WB	24	0	50	50	25	0.00
Metals	Arsenic	E	6	5	410	540	460	110
Metals	Arsenic	FS	24	24	560	1,200	850	140
Metals	Arsenic	WB	24	24	570	1,100	830	140
Metals	Barium	E	6	0	200	1,000	170	160
Metals	Barium	FS	24	0	200	200	100	0.00
Metals	Barium	WB	24	1	200	290	110	39
Metals	Beryllium	E	6	0	4.0	20	3.3	3.3
Metals	Beryllium	FS	24	0	4.0	4.0	2.0	0.00
Metals	Beryllium	WB	24	0	4.0	6.0	2.0	0.20
Metals	Cadmium	E	6	6	22	72	35	19
Metals	Cadmium	FS	24	21	4.0	15	9.7	3.4
Metals	Cadmium	WB	24	24	6.1	170	120	46
Metals	Chromium	E	6	2	100	500	100	78
Metals	Chromium	FS	24	10	100	490	180	170
Metals	Chromium	WB	24	21	100	540	210	170
Metals	Cobalt	E	6	6	11	67	43	20
Metals	Cobalt	FS	24	17	1.0	190	21	49
Metals	Cobalt	WB	24	24	34	240	110	53
Metals	Copper	E	6	6	5,300	6,600	6,200	510
Metals	Copper	FS	24	24	490	2,100	790	300
Metals	Copper	WB	24	24	1,100	2,300	1,400	280
Metals	Lead	E	6	2	10	50	14	9.5
Metals	Lead	FS	24	4	10	140	14	29
Metals	Lead	WB	24	17	10	92	21	26
Metals	Manganese	E	6	6	1,200	1,900	1,500	250
Metals	Manganese	FS	24	24	71	120	90	12
Metals	Manganese	WB	24	24	270	480	370	48
Metals	Mercury	E	6	0	79	120	48	6.9
Metals	Mercury	FS	24	7	83	510	100	110
Metals	Mercury	WB	24	6	71	130	64	24
Metals	Nickel	E	6	5	45	150	78	28
Metals	Nickel	FS	24	13	30	370	63	100
Metals	Nickel	WB	24	15	30	1,600	270	390
Metals	Selenium	E	6	6	3,700	5,500	4,200	670
Metals	Selenium	FS	24	24	290	430	350	40
Metals	Selenium	WB	24	24	360	680	530	77
Metals	Silver	E	6	0	100	500	83	82
Metals	Silver	FS	24	0	100	100	50	0.00
Metals	Silver	WB	24	0	100	200	52	10
Metals	Thallium	E	6	0	50	250	42	41
Metals	Thallium	FS	24	0	50	50	25	0.00
Metals	Thallium	WB	24	0	50	50	25	0.00
Metals	Vanadium	E	6	2	10	50	13	8.7
Metals	Vanadium	FS	24	0	10	10	5.0	0.00

Appendix D-3: Basin Summary Statistics
Spring Chinook Salmon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Metals	Vanadium	WB	24	21	10	37	17	8.8
Metals	Zinc	E	6	6	40,000	48,000	43,000	3,900
Metals	Zinc	FS	24	24	5,000	7,900	6,300	660
Metals	Zinc	WB	24	24	19,000	37,000	25,000	5,000
PCBs	Aroclor 1016	E	6	0	19	38	13	4.8
PCBs	Aroclor 1016	FS	24	0	17	38	11	3.0
PCBs	Aroclor 1016	WB	24	0	18	42	11	3.2
PCBs	Aroclor 1221	E	6	0	19	38	13	4.8
PCBs	Aroclor 1221	FS	24	0	17	38	11	3.0
PCBs	Aroclor 1221	WB	24	0	18	42	11	3.2
PCBs	Aroclor 1232	E	6	0	19	38	13	4.8
PCBs	Aroclor 1232	FS	24	0	17	38	11	3.0
PCBs	Aroclor 1232	WB	24	0	18	42	11	3.2
PCBs	Aroclor 1242	E	6	0	19	38	13	4.8
PCBs	Aroclor 1242	FS	24	0	17	38	11	3.0
PCBs	Aroclor 1242	WB	24	0	18	42	11	3.2
PCBs	Aroclor 1248	E	6	0	19	38	13	4.8
PCBs	Aroclor 1248	FS	24	0	17	38	11	3.0
PCBs	Aroclor 1248	WB	24	0	18	42	11	3.2
PCBs	Aroclor 1254	E	6	6	15	20	17	1.8
PCBs	Aroclor 1254	FS	24	24	8.6	24	16	3.7
PCBs	Aroclor 1254	WB	24	24	13	26	18	2.5
PCBs	Aroclor 1260	E	6	0	19	38	13	4.8
PCBs	Aroclor 1260	FS	24	0	17	38	11	3.0
PCBs	Aroclor 1260	WB	24	0	18	42	11	3.2
PCBs	PCB 77	E	6	6	0.0095	0.014	0.011	0.0018
PCBs	PCB 77	FS	24	23	0.00076	0.013	0.010	0.0028
PCBs	PCB 77	WB	24	24	0.0090	0.017	0.013	0.0017
PCBs	PCB 105	E	6	6	0.17	0.24	0.20	0.026
PCBs	PCB 105	FS	24	24	0.15	0.26	0.21	0.033
PCBs	PCB 105	WB	24	24	0.21	0.43	0.26	0.046
PCBs	PCB 114	E	6	6	0.015	0.020	0.018	0.0024
PCBs	PCB 114	FS	24	24	0.013	0.026	0.019	0.0035
PCBs	PCB 114	WB	24	24	0.018	0.041	0.023	0.0048
PCBs	PCB 118	E	6	6	0.40	0.51	0.45	0.048
PCBs	PCB 118	FS	24	24	0.31	0.59	0.48	0.080
PCBs	PCB 118	WB	24	24	0.49	0.92	0.59	0.094
PCBs	PCB 123	E	6	6	0.0049	0.012	0.0094	0.0028
PCBs	PCB 123	FS	24	24	0.0044	0.014	0.010	0.0026
PCBs	PCB 123	WB	24	24	0.0069	0.018	0.012	0.0027
PCBs	PCB 126	E	6	5	0.00090	0.0030	0.0021	0.00086
PCBs	PCB 126	FS	24	16	0.00081	0.0046	0.0023	0.0013
PCBs	PCB 126	WB	24	17	0.00052	0.0047	0.0024	0.0014
PCBs	PCB 156	E	6	6	0.024	0.031	0.028	0.0029
PCBs	PCB 156	FS	24	24	0.030	0.073	0.040	0.0085
PCBs	PCB 156	WB	24	24	0.039	0.089	0.049	0.012
PCBs	PCB 157	E	6	6	0.0070	0.011	0.0086	0.0014
PCBs	PCB 157	FS	24	24	0.0071	0.019	0.011	0.0024
PCBs	PCB 157	WB	24	24	0.0097	0.029	0.013	0.0042
PCBs	PCB 167	E	6	6	0.016	0.022	0.019	0.0021
PCBs	PCB 167	FS	24	24	0.019	0.034	0.027	0.0039
PCBs	PCB 167	WB	24	24	0.026	0.048	0.031	0.0051
PCBs	PCB 169	E	6	0	0.0010	0.0010	0.00050	0.00
PCBs	PCB 169	FS	24	0	0.00073	0.0026	0.00060	0.00020
PCBs	PCB 169	WB	24	0	0.0010	0.0027	0.00060	0.00019
PCBs	PCB 170	E	6	6	0.042	0.051	0.047	0.0034
PCBs	PCB 170	FS	24	24	0.055	0.17	0.079	0.023
PCBs	PCB 170	WB	24	24	0.063	0.20	0.090	0.030
PCBs	PCB 180	E	6	6	0.13	0.17	0.14	0.014
PCBs	PCB 180	FS	24	24	0.18	0.53	0.26	0.066
PCBs	PCB 180	WB	24	24	0.21	0.63	0.29	0.096
PCBs	PCB 189	E	6	6	0.0013	0.0021	0.0016	0.00032
PCBs	PCB 189	FS	24	19	0.0010	0.0057	0.0025	0.0012
PCBs	PCB 189	WB	24	19	0.0010	0.0072	0.0028	0.0016
Pesticides	Aldrin	E	6	0	1.9	3.8	1.3	0.48
Pesticides	Aldrin	FS	24	0	1.7	3.8	1.1	0.30
Pesticides	Aldrin	WB	24	0	1.8	4.2	1.1	0.32
Pesticides	Alpha-BHC	E	6	0	1.9	3.8	1.3	0.48
Pesticides	Alpha-BHC	FS	24	0	1.7	3.8	1.1	0.30
Pesticides	Alpha-BHC	WB	24	0	1.8	4.2	1.1	0.32
Pesticides	Alpha-Chlordene	E	6	0	1.9	3.8	1.3	0.48
Pesticides	Alpha-Chlordene	FS	24	0	1.7	3.8	1.1	0.30
Pesticides	Alpha-Chlordene	WB	24	0	1.8	4.2	1.1	0.32
Pesticides	Beta-BHC	E	6	0	1.9	3.8	1.3	0.48
Pesticides	Beta-BHC	FS	24	0	1.7	3.8	1.1	0.30
Pesticides	Beta-BHC	WB	24	0	1.8	4.2	1.1	0.32

Appendix D-3: Basin Summary Statistics
Spring Chinook Salmon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Pesticides	cis-Chlordane (alpha-Chlordane)	E	6	0	1.9	3.8	1.3	0.48
Pesticides	cis-Chlordane (alpha-Chlordane)	FS	24	0	1.7	3.8	1.1	0.30
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	24	1	1.4	4.2	1.1	0.32
Pesticides	cis-Nonachlor	E	6	0	1.9	3.8	1.3	0.48
Pesticides	cis-Nonachlor	FS	24	2	1.1	3.8	1.1	0.30
Pesticides	cis-Nonachlor	WB	24	1	1.8	4.2	1.1	0.36
Pesticides	DDD-o,p'	E	6	0	1.9	3.8	1.3	0.48
Pesticides	DDD-o,p'	FS	24	0	1.7	3.8	1.1	0.30
Pesticides	DDD-o,p'	WB	24	0	1.8	4.2	1.1	0.32
Pesticides	DDE-o,p'	E	6	0	1.9	3.8	1.3	0.48
Pesticides	DDE-o,p'	FS	24	1	1.4	3.8	1.1	0.31
Pesticides	DDE-o,p'	WB	24	4	0.99	4.2	1.1	0.32
Pesticides	DDT-o,p'	E	6	0	1.9	3.8	1.3	0.48
Pesticides	DDT-o,p'	FS	24	0	1.7	3.8	1.1	0.30
Pesticides	DDT-o,p'	WB	24	0	1.8	4.2	1.1	0.32
Pesticides	DDD-p,p'	E	6	6	2.4	4.1	3.1	0.65
Pesticides	DDD-p,p'	FS	24	23	1.3	3.9	2.2	0.75
Pesticides	DDD-p,p'	WB	24	20	1.8	5.5	2.9	1.1
Pesticides	DDE-p,p'	E	6	6	9.7	16	12	2.5
Pesticides	DDE-p,p'	FS	24	24	6.2	18	12	3.2
Pesticides	DDE-p,p'	WB	24	24	11	22	15	3.3
Pesticides	DDT-p,p'	E	6	6	4.0	7.2	5.2	1.3
Pesticides	DDT-p,p'	FS	24	23	1.5	7.1	4.3	1.7
Pesticides	DDT-p,p'	WB	24	24	3.3	8.0	5.4	1.3
Pesticides	DDMU	E	6	0	1.9	3.8	1.3	0.48
Pesticides	DDMU	FS	24	2	1.4	3.8	1.1	0.41
Pesticides	DDMU	WB	24	2	1.6	4.2	1.2	0.48
Pesticides	Delta-BHC	E	6	0	1.9	3.8	1.3	0.48
Pesticides	Delta-BHC	FS	24	0	1.7	3.8	1.1	0.30
Pesticides	Delta-BHC	WB	24	0	1.8	4.2	1.1	0.32
Pesticides	Endosulfan Sulfate	E	6	0	1.9	2.0	0.97	0.029
Pesticides	Endosulfan Sulfate	FS	24	0	1.7	1.9	0.92	0.046
Pesticides	Endosulfan Sulfate	WB	24	0	1.8	2.0	0.95	0.025
Pesticides	Gamma-Chlordane	E	6	0	1.9	3.8	1.3	0.48
Pesticides	Gamma-Chlordane	FS	24	0	1.7	3.8	1.1	0.30
Pesticides	Gamma-Chlordane	WB	24	0	1.8	4.2	1.1	0.32
Pesticides	gamma-Chlordene	E	6	0	1.9	3.8	1.3	0.48
Pesticides	gamma-Chlordene	FS	24	0	1.7	3.8	1.1	0.30
Pesticides	gamma-Chlordene	WB	24	0	1.8	4.2	1.1	0.32
Pesticides	Heptachlor	E	6	0	1.9	3.8	1.3	0.48
Pesticides	Heptachlor	FS	24	0	1.7	3.8	1.1	0.30
Pesticides	Heptachlor	WB	24	0	1.8	4.2	1.1	0.32
Pesticides	Heptachlor Epoxide	E	6	0	1.9	3.8	1.3	0.48
Pesticides	Heptachlor Epoxide	FS	24	0	1.7	3.8	1.1	0.37
Pesticides	Heptachlor Epoxide	WB	24	0	1.8	4.2	1.1	0.36
Pesticides	Hexachlorobenzene	E	6	6	3.4	5.1	4.2	0.63
Pesticides	Hexachlorobenzene	FS	24	17	1.2	3.5	2.1	0.96
Pesticides	Hexachlorobenzene	WB	24	15	1.8	3.8	2.3	1.1
Pesticides	Lindane	E	6	1	1.9	3.8	1.3	0.48
Pesticides	Lindane	FS	24	0	1.7	3.8	1.1	0.30
Pesticides	Lindane	WB	24	0	1.8	4.2	1.1	0.32
Pesticides	Mirex	E	6	0	1.9	3.8	1.3	0.48
Pesticides	Mirex	FS	24	0	1.7	3.8	1.1	0.30
Pesticides	Mirex	WB	24	0	1.8	4.2	1.1	0.32
Pesticides	Oxychlordane	E	6	0	1.9	3.8	1.3	0.48
Pesticides	Oxychlordane	FS	24	0	1.7	3.8	1.1	0.30
Pesticides	Oxychlordane	WB	24	0	1.8	4.2	1.1	0.32
Pesticides	Pentachloroanisol	E	6	3	0.76	3.8	1.4	0.62
Pesticides	Pentachloroanisol	FS	24	1	0.78	3.8	1.1	0.31
Pesticides	Pentachloroanisol	WB	24	6	0.72	4.2	1.1	0.33
Pesticides	Toxaphene	E	6	0	56	110	37	14
Pesticides	Toxaphene	FS	24	0	51	110	32	9.0
Pesticides	Toxaphene	WB	24	0	54	120	32	9.0
Pesticides	trans-Nonachlor	E	6	4	2.5	3.8	2.6	0.62
Pesticides	trans-Nonachlor	FS	24	21	1.2	3.8	2.6	0.64
Pesticides	trans-Nonachlor	WB	24	20	2.0	4.9	3.3	0.97
Semivolatiles	1,2,4-Trichlorobenzene	E	6	0	9.7	48	15	8.8
Semivolatiles	1,2,4-Trichlorobenzene	FS	24	0	4.6	25	4.6	1.9
Semivolatiles	1,2,4-Trichlorobenzene	WB	24	0	4.8	40	6.0	4.1
Semivolatiles	1,2-Diphenylhydrazine	E	6	0	9.7	48	15	8.8
Semivolatiles	1,2-Diphenylhydrazine	FS	24	0	4.6	25	4.6	1.9
Semivolatiles	1,2-Diphenylhydrazine	WB	24	0	4.8	40	6.0	4.1
Semivolatiles	2,4-Dinitrotoluene	E	6	0	19	96	26	17
Semivolatiles	2,4-Dinitrotoluene	FS	24	0	9.2	49	9.2	3.7
Semivolatiles	2,4-Dinitrotoluene	WB	24	0	9.7	81	12	8.2
Semivolatiles	2,6-Dinitrotoluene	E	6	0	39	190	59	35

Appendix D-3: Basin Summary Statistics
Spring Chinook Salmon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Semivolatiles	2,6-Dinitrotoluene	FS	24	0	19	98	18	7.5
Semivolatiles	2,6-Dinitrotoluene	WB	24	0	19	160	24	16
Semivolatiles	2-Chloronaphthalene	E	6	0	19	96	30	18
Semivolatiles	2-Chloronaphthalene	FS	24	0	9.2	49	9.2	3.7
Semivolatiles	2-Chloronaphthalene	WB	24	0	9.7	81	12	8.2
Semivolatiles	4-Bromophenyl-Phenylether	E	6	0	9.7	48	15	8.8
Semivolatiles	4-Bromophenyl-Phenylether	FS	24	0	4.6	25	4.6	1.9
Semivolatiles	4-Bromophenyl-Phenylether	WB	24	0	4.8	40	6.0	4.1
Semivolatiles	4-Chlorophenyl-Phenylether	E	6	0	9.7	48	15	8.8
Semivolatiles	4-Chlorophenyl-Phenylether	FS	24	0	4.6	25	4.6	1.9
Semivolatiles	4-Chlorophenyl-Phenylether	WB	24	0	4.8	40	6.0	4.1
Semivolatiles	Acenaphthene	E	6	1	20	96	32	15
Semivolatiles	Acenaphthene	FS	24	0	9.2	49	9.2	3.7
Semivolatiles	Acenaphthene	WB	24	1	9.7	81	13	8.5
Semivolatiles	Acenaphthylene	E	6	0	9.7	48	15	8.8
Semivolatiles	Acenaphthylene	FS	24	0	4.6	25	4.6	1.9
Semivolatiles	Acenaphthylene	WB	24	0	4.8	40	6.0	4.1
Semivolatiles	Anthracene	E	6	0	9.7	48	15	8.8
Semivolatiles	Anthracene	FS	24	0	4.6	25	4.6	1.9
Semivolatiles	Anthracene	WB	24	0	4.8	40	6.0	4.1
Semivolatiles	Benzene, 1,2-dichloro-	E	6	0	9.7	48	15	8.8
Semivolatiles	Benzene, 1,2-dichloro-	FS	24	0	4.6	25	4.6	1.9
Semivolatiles	Benzene, 1,2-dichloro-	WB	24	0	4.8	40	6.0	4.1
Semivolatiles	Benzene, 1,3-dichloro-	E	6	0	9.7	48	15	8.8
Semivolatiles	Benzene, 1,3-dichloro-	FS	24	0	4.6	25	4.6	1.9
Semivolatiles	Benzene, 1,3-dichloro-	WB	24	0	4.8	40	6.0	4.1
Semivolatiles	Benzene, 1,4-dichloro-	E	6	0	9.7	48	15	8.8
Semivolatiles	Benzene, 1,4-dichloro-	FS	24	0	4.6	25	4.6	1.9
Semivolatiles	Benzene, 1,4-dichloro-	WB	24	0	4.8	40	6.0	4.1
Semivolatiles	Benzo(a)anthracene	E	6	0	9.7	48	15	8.8
Semivolatiles	Benzo(a)anthracene	FS	24	0	4.9	25	6.0	3.0
Semivolatiles	Benzo(a)anthracene	WB	24	0	4.8	40	6.8	4.3
Semivolatiles	Benzo(a)pyrene	E	6	0	9.7	48	15	8.8
Semivolatiles	Benzo(a)pyrene	FS	24	0	4.9	25	6.1	2.9
Semivolatiles	Benzo(a)pyrene	WB	24	0	4.8	40	6.8	4.3
Semivolatiles	Benzo(g,h,i)perylene	E	6	0	19	96	30	18
Semivolatiles	Benzo(g,h,i)perylene	FS	24	0	9.9	50	12	5.9
Semivolatiles	Benzo(g,h,i)perylene	WB	24	0	9.7	81	14	8.6
Semivolatiles	Benzo[b]Fluoranthene	E	6	0	9.7	48	15	8.8
Semivolatiles	Benzo[b]Fluoranthene	FS	24	0	4.9	25	6.1	2.9
Semivolatiles	Benzo[b]Fluoranthene	WB	24	0	4.8	40	6.8	4.3
Semivolatiles	Benzo[k]fluoranthene	E	6	0	9.7	48	15	8.8
Semivolatiles	Benzo[k]fluoranthene	FS	24	0	4.9	25	6.1	2.9
Semivolatiles	Benzo[k]fluoranthene	WB	24	0	4.8	40	6.8	4.3
Semivolatiles	bis(2-Chloroisopropyl)ether	E	6	0	19	96	30	18
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	24	0	9.2	49	9.2	3.7
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	24	0	9.7	81	12	8.2
Semivolatiles	Chrysene	E	6	0	9.7	48	15	8.8
Semivolatiles	Chrysene	FS	24	0	4.9	25	6.0	3.0
Semivolatiles	Chrysene	WB	24	0	4.8	40	6.8	4.3
Semivolatiles	Dibenz[a,h]anthracene	E	6	0	19	96	30	18
Semivolatiles	Dibenz[a,h]anthracene	FS	24	0	9.9	50	12	5.9
Semivolatiles	Dibenz[a,h]anthracene	WB	24	0	9.7	81	14	8.6
Semivolatiles	Dibenzofuran	E	6	0	9.7	48	15	8.8
Semivolatiles	Dibenzofuran	FS	24	0	4.6	25	4.6	1.9
Semivolatiles	Dibenzofuran	WB	24	0	4.8	40	6.0	4.1
Semivolatiles	Fluoranthene	E	6	0	19	96	30	18
Semivolatiles	Fluoranthene	FS	24	0	9.2	49	9.2	3.7
Semivolatiles	Fluoranthene	WB	24	0	9.7	81	12	8.2
Semivolatiles	9H-Fluorene	E	6	0	9.7	48	15	8.8
Semivolatiles	9H-Fluorene	FS	24	0	4.6	25	4.6	1.9
Semivolatiles	9H-Fluorene	WB	24	0	4.8	40	6.0	4.1
Semivolatiles	Hexachlorobutadiene	E	6	0	9.7	48	15	8.8
Semivolatiles	Hexachlorobutadiene	FS	24	0	4.6	25	4.6	1.9
Semivolatiles	Hexachlorobutadiene	WB	24	0	4.8	40	6.0	4.1
Semivolatiles	Hexachloroethane	E	6	0	9.7	48	15	8.8
Semivolatiles	Hexachloroethane	FS	24	0	4.6	25	4.6	1.9
Semivolatiles	Hexachloroethane	WB	24	0	4.8	40	6.0	4.1
Semivolatiles	Indeno(1,2,3-cd)pyrene	E	6	0	19	96	30	18
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	24	0	9.9	50	12	5.9
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	24	0	9.7	81	14	8.6
Semivolatiles	Naphthalene	E	6	1	44	110	42	22
Semivolatiles	Naphthalene	FS	24	0	12	69	19	8.0
Semivolatiles	Naphthalene	WB	24	0	14	170	24	16
Semivolatiles	Naphthalene, 1-methyl-	E	6	0	9.7	48	15	8.8
Semivolatiles	Naphthalene, 1-methyl-	FS	24	0	4.6	25	4.6	1.9

Appendix D-3: Basin Summary Statistics
Spring Chinook Salmon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Semivolatiles	Naphthalene, 1-methyl-	WB	24	0	4.8	40	6.0	4.1
Semivolatiles	Naphthalene, 2-methyl-	E	6	1	12	48	16	7.1
Semivolatiles	Naphthalene, 2-methyl-	FS	24	4	4.9	29	5.9	3.5
Semivolatiles	Naphthalene, 2-methyl-	WB	24	5	4.8	40	7.9	5.2
Semivolatiles	Nitrobenzene	E	6	0	9.7	48	15	8.8
Semivolatiles	Nitrobenzene	FS	24	0	4.6	25	4.6	1.9
Semivolatiles	Nitrobenzene	WB	24	0	4.8	40	6.0	4.1
Semivolatiles	Phenanthrene	E	6	0	9.7	48	15	8.8
Semivolatiles	Phenanthrene	FS	24	0	4.6	25	4.8	1.8
Semivolatiles	Phenanthrene	WB	24	0	5.0	40	6.2	4.0
Semivolatiles	Pyrene	E	6	0	19	96	30	18
Semivolatiles	Pyrene	FS	24	0	9.9	50	12	5.9
Semivolatiles	Pyrene	WB	24	2	9.7	120	18	24
Semivolatiles	Retene	E	6	0	19	96	30	18
Semivolatiles	Retene	FS	24	0	9.9	50	12	5.9
Semivolatiles	Retene	WB	24	0	9.7	81	14	8.6

Appendix D-3: Basin Summary Statistics
Steelhead

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Dioxin/furans	2,3,7,8-TCDD	E	1	0	0.000030	0.000030	0.000015	na
Dioxin/furans	2,3,7,8-TCDD	FS	21	5	0.000010	0.000080	0.000021	0.000018
Dioxin/furans	2,3,7,8-TCDD	WB	21	6	0.000010	0.000060	0.000020	0.000016
Dioxin/furans	1,2,3,7,8-PeCDD	E	1	0	0.000030	0.000030	0.000015	na
Dioxin/furans	1,2,3,7,8-PeCDD	FS	21	13	0.000010	0.00016	0.000064	0.000048
Dioxin/furans	1,2,3,7,8-PeCDD	WB	21	9	0.000010	0.00026	0.000074	0.000087
Dioxin/furans	1,2,3,4,7,8-HxCDD	E	1	0	0.000020	0.000020	0.000010	na
Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	21	8	0.000010	0.00012	0.000033	0.000038
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	21	5	0.000010	0.00014	0.000027	0.000041
Dioxin/furans	1,2,3,6,7,8-HxCDD	E	1	0	0.000020	0.000020	0.000010	na
Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	21	5	0.000010	0.00011	0.000026	0.000027
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	21	10	0.000010	0.00015	0.000044	0.000043
Dioxin/furans	1,2,3,7,8,9-HxCDD	E	1	0	0.000020	0.000020	0.000010	na
Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	21	6	0.000010	0.000090	0.000019	0.000014
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	21	6	0.000010	0.000060	0.000019	0.000016
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	E	1	1	0.000070	0.000070	0.000070	na
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	21	12	0.000010	0.00028	0.000086	0.000083
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	21	13	0.000020	0.00029	0.000100	0.000085
Dioxin/furans	OCDD	E	1	1	0.00038	0.00038	0.00038	na
Dioxin/furans	OCDD	FS	21	16	0.000010	0.0010	0.00026	0.00027
Dioxin/furans	OCDD	WB	21	15	0.000020	0.0026	0.00048	0.00072
Dioxin/furans	2,3,7,8-TCDF	E	1	1	0.00022	0.00022	0.00022	na
Dioxin/furans	2,3,7,8-TCDF	FS	21	21	0.00018	0.00065	0.00038	0.000097
Dioxin/furans	2,3,7,8-TCDF	WB	21	21	0.00025	0.00060	0.00044	0.00012
Dioxin/furans	1,2,3,7,8-PeCDF	E	1	0	0.000020	0.000020	0.000010	na
Dioxin/furans	1,2,3,7,8-PeCDF	FS	21	10	0.000010	0.00021	0.000056	0.000057
Dioxin/furans	1,2,3,7,8-PeCDF	WB	21	12	0.000010	0.00019	0.000079	0.000066
Dioxin/furans	2,3,4,7,8-PeCDF	E	1	0	0.000020	0.000020	0.000010	na
Dioxin/furans	2,3,4,7,8-PeCDF	FS	21	16	0.000010	0.00047	0.00018	0.00013
Dioxin/furans	2,3,4,7,8-PeCDF	WB	21	16	0.000010	0.00037	0.00020	0.00013
Dioxin/furans	1,2,3,4,7,8-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	21	5	0.000010	0.00013	0.000019	0.000016
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	21	7	0.000010	0.000060	0.000019	0.000016
Dioxin/furans	1,2,3,6,7,8-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	21	5	0.000010	0.00013	0.000021	0.000021
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	21	7	0.000010	0.000090	0.000026	0.000027
Dioxin/furans	1,2,3,7,8,9-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	21	3	0.000010	0.00013	0.000018	0.000019
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	21	3	0.000010	0.000080	0.000019	0.000023
Dioxin/furans	2,3,4,6,7,8-HxCDF	E	1	0	0.000020	0.000020	0.000010	na
Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	21	9	0.000010	0.00023	0.000056	0.000072
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	21	10	0.000010	0.00022	0.000067	0.000077
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	E	1	0	0.000020	0.000020	0.000010	na
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	21	6	0.000010	0.00010	0.000029	0.000029
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	21	3	0.000010	0.00012	0.000025	0.000029
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	E	1	0	0.000020	0.000020	0.000010	na
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	21	2	0.000010	0.00010	0.000015	0.000010
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	21	1	0.000010	0.000070	0.000016	0.000013
Dioxin/furans	OCDF	E	1	0	0.000030	0.000030	0.000015	na
Dioxin/furans	OCDF	FS	21	2	0.000010	0.00011	0.000025	0.000016
Dioxin/furans	OCDF	WB	21	6	0.000010	0.00043	0.000064	0.000095
Guaiacols/Phenols	4-Chloroguaiacol	E	1	0	920	920	460	na
Guaiacols/Phenols	4-Chloroguaiacol	FS	21	0	450	990	410	110
Guaiacols/Phenols	4-Chloroguaiacol	WB	21	0	470	1,000	450	77
Guaiacols/Phenols	3,4-Dichloroguaiacol	E	1	0	920	920	460	na
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	21	0	450	990	410	110
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	21	0	470	1,000	450	77
Guaiacols/Phenols	4,5-Dichloroguaiacol	E	1	0	920	920	460	na
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	21	0	450	990	410	110
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	21	0	470	1,000	450	77
Guaiacols/Phenols	4,6-Dichloroguaiacol	E	1	0	920	920	460	na
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	21	0	450	990	410	110
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	21	0	470	1,000	450	77
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	E	1	0	920	920	460	na
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	21	0	450	990	410	110
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	21	0	470	1,000	450	77
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	E	1	0	370	370	180	na
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	21	0	180	400	170	42
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	21	0	190	400	180	31
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	E	1	0	920	920	460	na
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	21	0	450	990	410	110
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	21	0	470	1,000	450	77
Guaiacols/Phenols	Tetrachloroguaiacol	E	1	0	370	370	180	na
Guaiacols/Phenols	Tetrachloroguaiacol	FS	21	0	180	400	170	42
Guaiacols/Phenols	Tetrachloroguaiacol	WB	21	0	190	400	180	31
Guaiacols/Phenols	2-Chlorophenol	E	1	0	370	370	180	na

Appendix D-3: Basin Summary Statistics
Steelhead

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Guaiacols/Phenols	2-Chlorophenol	FS	21	0	180	400	170	42
Guaiacols/Phenols	2-Chlorophenol	WB	21	0	190	400	180	31
Guaiacols/Phenols	4-Chloro-3-methylphenol	E	1	0	370	370	180	na
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	21	0	180	400	170	42
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	21	0	190	400	180	31
Guaiacols/Phenols	2,4-Dichlorophenol	E	1	0	370	370	180	na
Guaiacols/Phenols	2,4-Dichlorophenol	FS	21	0	180	400	170	42
Guaiacols/Phenols	2,4-Dichlorophenol	WB	21	0	190	400	180	31
Guaiacols/Phenols	2,4-Dimethylphenol	E	1	0	920	920	460	na
Guaiacols/Phenols	2,4-Dimethylphenol	FS	21	0	450	990	410	110
Guaiacols/Phenols	2,4-Dimethylphenol	WB	21	0	470	1,000	450	77
Guaiacols/Phenols	2,4,5-Trichlorophenol	E	1	0	370	370	180	na
Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	21	0	180	400	170	42
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	21	0	190	400	180	31
Guaiacols/Phenols	2,4,6-Trichlorophenol	E	1	0	370	370	180	na
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	21	0	180	400	170	42
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	21	0	190	400	180	31
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	E	1	0	370	370	180	na
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	21	0	180	400	170	42
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	21	0	190	400	180	31
Guaiacols/Phenols	Pentachlorophenol	E	1	0	370	370	180	na
Guaiacols/Phenols	Pentachlorophenol	FS	21	0	180	400	170	42
Guaiacols/Phenols	Pentachlorophenol	WB	21	0	190	400	180	31
Guaiacols/Phenols	Phenol	E	1	0	370	370	180	na
Guaiacols/Phenols	Phenol	FS	21	0	180	400	170	42
Guaiacols/Phenols	Phenol	WB	21	0	190	400	180	31
Metals	Aluminum	E	1	1	4,500	4,500	4,500	na
Metals	Aluminum	FS	21	7	840	8,500	1,200	1,700
Metals	Aluminum	WB	21	4	500	1,200	550	160
Metals	Antimony	E	1	0	50	50	25	na
Metals	Antimony	FS	21	0	50	50	25	0.00
Metals	Antimony	WB	21	0	50	50	25	0.00
Metals	Arsenic	E	1	0	50	50	25	na
Metals	Arsenic	FS	21	21	280	1,500	560	260
Metals	Arsenic	WB	21	21	290	1,200	580	220
Metals	Barium	E	1	0	200	200	100	na
Metals	Barium	FS	21	7	200	710	220	200
Metals	Barium	WB	21	9	200	550	220	160
Metals	Beryllium	E	1	0	4.0	4.0	2.0	na
Metals	Beryllium	FS	21	2	4.0	6.3	2.4	1.0
Metals	Beryllium	WB	21	3	4.0	7.6	2.9	1.8
Metals	Cadmium	E	1	1	34	34	34	na
Metals	Cadmium	FS	21	19	4.0	8.8	5.8	1.9
Metals	Cadmium	WB	21	21	29	88	57	14
Metals	Chromium	E	1	1	220	220	220	na
Metals	Chromium	FS	21	6	100	210	81	54
Metals	Chromium	WB	21	16	100	340	140	73
Metals	Cobalt	E	1	1	170	170	170	na
Metals	Cobalt	FS	21	21	5.9	200	57	66
Metals	Cobalt	WB	21	21	58	280	150	51
Metals	Copper	E	1	1	18,000	18,000	18,000	na
Metals	Copper	FS	21	21	540	940	720	110
Metals	Copper	WB	21	21	1,900	6,800	3,200	1,100
Metals	Lead	E	1	1	41	41	41	na
Metals	Lead	FS	21	4	10	23	7.5	5.6
Metals	Lead	WB	21	12	10	360	45	80
Metals	Manganese	E	1	1	2,200	2,200	2,200	na
Metals	Manganese	FS	21	21	100	310	150	45
Metals	Manganese	WB	21	21	250	650	460	110
Metals	Mercury	E	1	0	43	43	22	na
Metals	Mercury	FS	21	21	70	210	120	30
Metals	Mercury	WB	21	18	50	420	100	78
Metals	Nickel	E	1	1	520	520	520	na
Metals	Nickel	FS	21	18	30	70	44	16
Metals	Nickel	WB	21	19	30	17,000	900	3,700
Metals	Selenium	E	1	1	4,500	4,500	4,500	na
Metals	Selenium	FS	21	20	250	500	330	46
Metals	Selenium	WB	21	21	460	940	650	140
Metals	Silver	E	1	0	100	100	50	na
Metals	Silver	FS	21	0	100	200	58	18
Metals	Silver	WB	21	0	100	200	64	23
Metals	Thallium	E	1	0	50	50	25	na
Metals	Thallium	FS	21	0	50	50	25	0.00
Metals	Thallium	WB	21	0	50	50	25	0.00
Metals	Vanadium	E	1	1	110	110	110	na
Metals	Vanadium	FS	21	11	10	44	14	9.2

Appendix D-3: Basin Summary Statistics
Steelhead

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Metals	Vanadium	WB	21	20	13	190	66	46
Metals	Zinc	E	1	1	76,000	76,000	76,000	na
Metals	Zinc	FS	21	21	6,300	9,600	7,900	1,000
Metals	Zinc	WB	21	21	17,000	31,000	22,000	3,400
PCBs	Aroclor 1016	E	1	0	20	20	10	na
PCBs	Aroclor 1016	FS	21	0	16	21	9.7	0.54
PCBs	Aroclor 1016	WB	21	0	18	21	9.7	0.41
PCBs	Aroclor 1221	E	1	0	20	20	10	na
PCBs	Aroclor 1221	FS	21	0	16	21	9.7	0.54
PCBs	Aroclor 1221	WB	21	0	18	21	9.7	0.41
PCBs	Aroclor 1232	E	1	0	20	20	10	na
PCBs	Aroclor 1232	FS	21	0	16	21	9.7	0.54
PCBs	Aroclor 1232	WB	21	0	18	21	9.7	0.41
PCBs	Aroclor 1242	E	1	0	20	20	10	na
PCBs	Aroclor 1242	FS	21	0	16	21	9.7	0.54
PCBs	Aroclor 1242	WB	21	0	18	21	9.7	0.41
PCBs	Aroclor 1248	E	1	0	20	20	10	na
PCBs	Aroclor 1248	FS	21	0	16	21	9.7	0.54
PCBs	Aroclor 1248	WB	21	0	18	21	9.7	0.41
PCBs	Aroclor 1254	E	1	1	15	15	15	na
PCBs	Aroclor 1254	FS	21	21	8.4	21	15	3.2
PCBs	Aroclor 1254	WB	21	21	8.9	29	18	5.3
PCBs	Aroclor 1260	E	1	0	20	20	10	na
PCBs	Aroclor 1260	FS	21	5	5.8	21	9.2	1.5
PCBs	Aroclor 1260	WB	21	5	6.4	21	9.4	0.97
PCBs	PCB 77	E	1	1	0.0080	0.0080	0.0080	na
PCBs	PCB 77	FS	21	21	0.0082	0.020	0.014	0.0033
PCBs	PCB 77	WB	21	21	0.0096	0.022	0.016	0.0037
PCBs	PCB 105	E	1	1	0.15	0.15	0.15	na
PCBs	PCB 105	FS	21	21	0.15	0.34	0.23	0.053
PCBs	PCB 105	WB	21	21	0.17	0.33	0.26	0.054
PCBs	PCB 114	E	1	1	0.015	0.015	0.015	na
PCBs	PCB 114	FS	21	21	0.016	0.032	0.023	0.0049
PCBs	PCB 114	WB	21	21	0.018	0.033	0.026	0.0049
PCBs	PCB 118	E	1	1	0.35	0.35	0.35	na
PCBs	PCB 118	FS	21	21	0.37	0.84	0.56	0.13
PCBs	PCB 118	WB	21	21	0.41	0.80	0.64	0.13
PCBs	PCB 123	E	1	1	0.0058	0.0058	0.0058	na
PCBs	PCB 123	FS	21	21	0.0063	0.015	0.0096	0.0026
PCBs	PCB 123	WB	21	21	0.0065	0.025	0.013	0.0041
PCBs	PCB 126	E	1	1	0.0021	0.0021	0.0021	na
PCBs	PCB 126	FS	21	18	0.00050	0.0065	0.0039	0.0018
PCBs	PCB 126	WB	21	17	0.00067	0.0090	0.0043	0.0024
PCBs	PCB 156	E	1	1	0.028	0.028	0.028	na
PCBs	PCB 156	FS	21	21	0.034	0.086	0.053	0.015
PCBs	PCB 156	WB	21	21	0.033	0.081	0.061	0.014
PCBs	PCB 157	E	1	1	0.0077	0.0077	0.0077	na
PCBs	PCB 157	FS	21	21	0.0084	0.025	0.015	0.0043
PCBs	PCB 157	WB	21	21	0.010	0.025	0.017	0.0039
PCBs	PCB 167	E	1	1	0.018	0.018	0.018	na
PCBs	PCB 167	FS	21	21	0.022	0.050	0.033	0.0079
PCBs	PCB 167	WB	21	21	0.022	0.049	0.038	0.0077
PCBs	PCB 169	E	1	0	0.0010	0.0010	0.00050	na
PCBs	PCB 169	FS	21	1	0.00062	0.0039	0.00066	0.00038
PCBs	PCB 169	WB	21	0	0.0010	0.0036	0.00074	0.00041
PCBs	PCB 170	E	1	1	0.055	0.055	0.055	na
PCBs	PCB 170	FS	21	21	0.060	0.17	0.10	0.027
PCBs	PCB 170	WB	21	21	0.076	0.18	0.12	0.027
PCBs	PCB 180	E	1	1	0.16	0.16	0.16	na
PCBs	PCB 180	FS	21	21	0.20	0.45	0.31	0.068
PCBs	PCB 180	WB	21	21	0.24	0.56	0.35	0.074
PCBs	PCB 189	E	1	0	0.0010	0.0010	0.00050	na
PCBs	PCB 189	FS	21	21	0.0023	0.0086	0.0042	0.0015
PCBs	PCB 189	WB	21	19	0.0010	0.0082	0.0043	0.0019
Pesticides	Aldrin	E	1	0	2.0	2.0	1.0	na
Pesticides	Aldrin	FS	21	0	1.6	2.1	0.97	0.054
Pesticides	Aldrin	WB	21	0	1.8	2.1	0.97	0.041
Pesticides	Alpha-BHC	E	1	0	2.0	2.0	1.0	na
Pesticides	Alpha-BHC	FS	21	0	1.6	2.1	0.97	0.054
Pesticides	Alpha-BHC	WB	21	0	1.8	2.1	0.97	0.041
Pesticides	Alpha-Chlordene	E	1	0	2.0	2.0	1.0	na
Pesticides	Alpha-Chlordene	FS	21	0	1.6	2.1	0.97	0.054
Pesticides	Alpha-Chlordene	WB	21	0	1.8	2.1	0.97	0.041
Pesticides	Beta-BHC	E	1	0	2.0	2.0	1.0	na
Pesticides	Beta-BHC	FS	21	0	1.6	2.1	0.97	0.054
Pesticides	Beta-BHC	WB	21	0	1.8	2.1	0.97	0.041

Appendix D-3: Basin Summary Statistics
Steelhead

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Pesticides	cis-Chlordane (alpha-Chlordane)	E	1	1	1.3	1.3	1.3	na
Pesticides	cis-Chlordane (alpha-Chlordane)	FS	21	5	1.2	2.1	1.1	0.21
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	21	5	1.6	2.3	1.2	0.43
Pesticides	cis-Nonachlor	E	1	0	2.0	2.0	1.0	na
Pesticides	cis-Nonachlor	FS	21	5	1.5	2.3	1.2	0.44
Pesticides	cis-Nonachlor	WB	21	10	1.4	2.5	1.5	0.60
Pesticides	DDD-o,p'	E	1	0	2.0	2.0	1.0	na
Pesticides	DDD-o,p'	FS	21	0	1.6	2.1	0.97	0.054
Pesticides	DDD-o,p'	WB	21	3	1.8	2.1	1.1	0.31
Pesticides	DDE-o,p'	E	1	0	2.0	2.0	1.0	na
Pesticides	DDE-o,p'	FS	21	6	0.78	2.0	1.0	0.24
Pesticides	DDE-o,p'	WB	21	11	1.2	2.0	1.3	0.39
Pesticides	DDT-o,p'	E	1	0	2.0	2.0	1.0	na
Pesticides	DDT-o,p'	FS	21	0	1.6	2.1	0.97	0.054
Pesticides	DDT-o,p'	WB	21	3	1.8	2.3	1.1	0.40
Pesticides	DDD-p,p'	E	1	1	3.3	3.3	3.3	na
Pesticides	DDD-p,p'	FS	21	21	1.7	9.0	4.4	2.3
Pesticides	DDD-p,p'	WB	21	21	2.1	11	5.6	2.6
Pesticides	DDE-p,p'	E	1	1	6.5	6.5	6.5	na
Pesticides	DDE-p,p'	FS	21	21	5.1	28	11	5.6
Pesticides	DDE-p,p'	WB	21	21	5.3	33	15	8.9
Pesticides	DDT-p,p'	E	1	0	2.0	2.0	1.0	na
Pesticides	DDT-p,p'	FS	21	15	1.2	4.7	2.3	1.2
Pesticides	DDT-p,p'	WB	21	14	1.4	6.0	2.7	1.6
Pesticides	DDMU	E	1	0	2.0	2.0	1.0	na
Pesticides	DDMU	FS	21	5	1.3	2.0	1.1	0.25
Pesticides	DDMU	WB	21	9	1.4	2.4	1.3	0.47
Pesticides	Delta-BHC	E	1	0	2.0	2.0	1.0	na
Pesticides	Delta-BHC	FS	21	0	1.6	2.1	0.97	0.054
Pesticides	Delta-BHC	WB	21	0	1.8	2.1	0.97	0.041
Pesticides	Endosulfan Sulfate	E	1	0	2.0	2.0	1.0	na
Pesticides	Endosulfan Sulfate	FS	21	3	1.6	2.1	0.97	0.057
Pesticides	Endosulfan Sulfate	WB	21	3	1.8	2.1	0.97	0.042
Pesticides	Gamma-Chlordane	E	1	0	2.0	2.0	1.0	na
Pesticides	Gamma-Chlordane	FS	21	0	1.6	2.1	0.97	0.054
Pesticides	Gamma-Chlordane	WB	21	0	1.8	2.1	0.97	0.041
Pesticides	gamma-Chlordene	E	1	0	2.0	2.0	1.0	na
Pesticides	gamma-Chlordene	FS	21	0	1.6	2.1	0.97	0.054
Pesticides	gamma-Chlordene	WB	21	0	1.8	2.1	0.97	0.041
Pesticides	Heptachlor	E	1	0	2.0	2.0	1.0	na
Pesticides	Heptachlor	FS	21	0	1.6	2.1	0.97	0.054
Pesticides	Heptachlor	WB	21	0	1.8	2.1	0.97	0.041
Pesticides	Heptachlor Epoxide	E	1	0	2.0	2.0	1.0	na
Pesticides	Heptachlor Epoxide	FS	21	0	1.6	2.1	0.97	0.054
Pesticides	Heptachlor Epoxide	WB	21	3	1.8	2.1	0.97	0.042
Pesticides	Hexachlorobenzene	E	1	1	1.9	1.9	1.9	na
Pesticides	Hexachlorobenzene	FS	21	18	1.0	2.8	1.6	0.46
Pesticides	Hexachlorobenzene	WB	21	21	1.1	3.2	2.2	0.63
Pesticides	Lindane	E	1	0	2.0	2.0	1.0	na
Pesticides	Lindane	FS	21	0	1.6	2.1	0.97	0.054
Pesticides	Lindane	WB	21	0	1.8	2.1	0.97	0.041
Pesticides	Mirex	E	1	0	2.0	2.0	1.0	na
Pesticides	Mirex	FS	21	0	1.6	2.1	0.97	0.054
Pesticides	Mirex	WB	21	0	1.8	2.1	0.97	0.041
Pesticides	Oxychlordane	E	1	0	2.0	2.0	1.0	na
Pesticides	Oxychlordane	FS	21	0	1.6	2.1	0.97	0.054
Pesticides	Oxychlordane	WB	21	0	1.8	2.1	0.97	0.041
Pesticides	Pentachloroanisol	E	1	0	2.0	2.0	1.0	na
Pesticides	Pentachloroanisol	FS	21	0	1.6	2.1	0.97	0.054
Pesticides	Pentachloroanisol	WB	21	2	0.91	2.1	1.0	0.16
Pesticides	Toxaphene	E	1	0	60	60	30	na
Pesticides	Toxaphene	FS	21	0	48	63	29	1.5
Pesticides	Toxaphene	WB	21	0	53	62	29	1.2
Pesticides	trans-Nonachlor	E	1	1	1.0	1.0	1.0	na
Pesticides	trans-Nonachlor	FS	21	12	1.2	3.1	1.5	0.67
Pesticides	trans-Nonachlor	WB	21	18	1.4	3.3	2.2	0.80
Semivolatiles	1,2,4-Trichlorobenzene	E	1	0	9.2	9.2	4.6	na
Semivolatiles	1,2,4-Trichlorobenzene	FS	21	0	4.5	24	4.5	2.0
Semivolatiles	1,2,4-Trichlorobenzene	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	1,2-Diphenylhydrazine	E	1	0	9.2	9.2	4.6	na
Semivolatiles	1,2-Diphenylhydrazine	FS	21	1	4.5	100	6.8	11
Semivolatiles	1,2-Diphenylhydrazine	WB	21	1	4.6	26	6.0	3.3
Semivolatiles	2,4-Dinitrotoluene	E	1	0	18	18	9.2	na
Semivolatiles	2,4-Dinitrotoluene	FS	21	2	9.0	48	8.9	4.3
Semivolatiles	2,4-Dinitrotoluene	WB	21	1	9.3	52	12	6.6
Semivolatiles	2,6-Dinitrotoluene	E	1	0	37	37	18	na

Appendix D-3: Basin Summary Statistics
Steelhead

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Semivolatiles	2,6-Dinitrotoluene	FS	21	0	18	97	18	8.1
Semivolatiles	2,6-Dinitrotoluene	WB	21	0	19	100	24	13
Semivolatiles	2-Chloronaphthalene	E	1	0	18	18	9.2	na
Semivolatiles	2-Chloronaphthalene	FS	21	0	9.0	48	9.0	4.1
Semivolatiles	2-Chloronaphthalene	WB	21	0	9.3	52	12	6.5
Semivolatiles	4-Bromophenyl-Phenylether	E	1	0	9.2	9.2	4.6	na
Semivolatiles	4-Bromophenyl-Phenylether	FS	21	0	4.5	24	4.5	2.0
Semivolatiles	4-Bromophenyl-Phenylether	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	4-Chlorophenyl-Phenylether	E	1	0	9.2	9.2	4.6	na
Semivolatiles	4-Chlorophenyl-Phenylether	FS	21	0	4.5	24	4.5	2.0
Semivolatiles	4-Chlorophenyl-Phenylether	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	Acenaphthene	E	1	0	18	18	9.2	na
Semivolatiles	Acenaphthene	FS	21	0	9.0	48	9.0	4.1
Semivolatiles	Acenaphthene	WB	21	0	9.3	52	12	6.5
Semivolatiles	Acenaphthylene	E	1	0	9.2	9.2	4.6	na
Semivolatiles	Acenaphthylene	FS	21	0	4.5	24	4.5	2.0
Semivolatiles	Acenaphthylene	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	Anthracene	E	1	0	9.2	9.2	4.6	na
Semivolatiles	Anthracene	FS	21	0	4.5	24	4.5	2.0
Semivolatiles	Anthracene	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	Benzene, 1,2-dichloro-	E	1	0	9.2	9.2	4.6	na
Semivolatiles	Benzene, 1,2-dichloro-	FS	21	0	4.5	24	4.5	2.0
Semivolatiles	Benzene, 1,2-dichloro-	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	Benzene, 1,3-dichloro-	E	1	0	9.2	9.2	4.6	na
Semivolatiles	Benzene, 1,3-dichloro-	FS	21	0	4.5	24	4.5	2.0
Semivolatiles	Benzene, 1,3-dichloro-	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	Benzene, 1,4-dichloro-	E	1	0	9.2	9.2	4.6	na
Semivolatiles	Benzene, 1,4-dichloro-	FS	21	0	4.5	24	4.5	2.0
Semivolatiles	Benzene, 1,4-dichloro-	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	Benzo(a)anthracene	E	1	0	9.2	9.2	4.6	na
Semivolatiles	Benzo(a)anthracene	FS	21	0	4.5	24	4.5	2.0
Semivolatiles	Benzo(a)anthracene	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	Benzo(a)pyrene	E	1	0	9.2	9.2	4.6	na
Semivolatiles	Benzo(a)pyrene	FS	21	1	4.5	24	4.5	2.1
Semivolatiles	Benzo(a)pyrene	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	Benzo(g,h,i)perylene	E	1	0	18	18	9.2	na
Semivolatiles	Benzo(g,h,i)perylene	FS	21	0	9.0	48	9.0	4.1
Semivolatiles	Benzo(g,h,i)perylene	WB	21	0	9.3	52	12	6.5
Semivolatiles	Benzo[b]Fluoranthene	E	1	0	9.2	9.2	4.6	na
Semivolatiles	Benzo[b]Fluoranthene	FS	21	0	4.5	24	4.5	2.0
Semivolatiles	Benzo[b]Fluoranthene	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	Benzo[k]fluoranthene	E	1	0	9.2	9.2	4.6	na
Semivolatiles	Benzo[k]fluoranthene	FS	21	0	4.5	24	4.5	2.0
Semivolatiles	Benzo[k]fluoranthene	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	bis(2-Chloroisopropyl)ether	E	1	0	18	18	9.2	na
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	21	0	9.0	48	9.0	4.1
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	21	0	9.3	52	12	6.5
Semivolatiles	Chrysene	E	1	0	9.2	9.2	4.6	na
Semivolatiles	Chrysene	FS	21	0	4.5	24	4.5	2.0
Semivolatiles	Chrysene	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	Dibenz[a,h]anthracene	E	1	0	18	18	9.2	na
Semivolatiles	Dibenz[a,h]anthracene	FS	21	0	9.0	48	9.0	4.1
Semivolatiles	Dibenz[a,h]anthracene	WB	21	0	9.3	52	12	6.5
Semivolatiles	Dibenzofuran	E	1	0	9.2	9.2	4.6	na
Semivolatiles	Dibenzofuran	FS	21	0	4.5	24	4.5	2.0
Semivolatiles	Dibenzofuran	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	Fluoranthene	E	1	0	18	18	9.2	na
Semivolatiles	Fluoranthene	FS	21	0	9.0	48	9.0	4.1
Semivolatiles	Fluoranthene	WB	21	0	9.3	52	12	6.5
Semivolatiles	9H-Fluorene	E	1	0	9.2	9.2	4.6	na
Semivolatiles	9H-Fluorene	FS	21	0	4.5	24	4.5	2.0
Semivolatiles	9H-Fluorene	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	Hexachlorobutadiene	E	1	0	9.2	9.2	4.6	na
Semivolatiles	Hexachlorobutadiene	FS	21	0	4.5	24	4.5	2.0
Semivolatiles	Hexachlorobutadiene	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	Hexachloroethane	E	1	0	9.2	9.2	4.6	na
Semivolatiles	Hexachloroethane	FS	21	0	4.5	24	4.5	2.0
Semivolatiles	Hexachloroethane	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	Indeno(1,2,3-cd)pyrene	E	1	0	18	18	9.2	na
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	21	0	9.0	48	9.0	4.1
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	21	0	9.3	52	12	6.5
Semivolatiles	Naphthalene	E	1	0	22	22	11	na
Semivolatiles	Naphthalene	FS	21	0	7.4	35	8.0	3.9
Semivolatiles	Naphthalene	WB	21	0	7.2	73	12	9.7
Semivolatiles	Naphthalene, 1-methyl-	E	1	0	9.2	9.2	4.6	na
Semivolatiles	Naphthalene, 1-methyl-	FS	21	0	4.5	24	4.5	2.0

Appendix D-3: Basin Summary Statistics
Steelhead

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Semivolatiles	Naphthalene, 1-methyl-	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	Naphthalene, 2-methyl-	E	1	0	9.2	9.2	4.6	na
Semivolatiles	Naphthalene, 2-methyl-	FS	21	0	4.5	24	4.6	2.0
Semivolatiles	Naphthalene, 2-methyl-	WB	21	0	4.6	35	6.2	3.8
Semivolatiles	Nitrobenzene	E	1	0	9.2	9.2	4.6	na
Semivolatiles	Nitrobenzene	FS	21	0	4.5	24	4.5	2.0
Semivolatiles	Nitrobenzene	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	Phenanthrene	E	1	0	9.2	9.2	4.6	na
Semivolatiles	Phenanthrene	FS	21	0	4.5	24	4.5	2.0
Semivolatiles	Phenanthrene	WB	21	0	4.6	26	5.9	3.2
Semivolatiles	Pyrene	E	1	0	18	18	9.2	na
Semivolatiles	Pyrene	FS	21	0	9.0	48	9.0	4.1
Semivolatiles	Pyrene	WB	21	0	9.3	52	12	6.5
Semivolatiles	Retene	E	1	0	18	18	9.2	na
Semivolatiles	Retene	FS	21	0	9.0	48	9.0	4.1
Semivolatiles	Retene	WB	21	0	9.3	52	12	6.5

Appendix D-3: Basin Summary Statistics
Eulachon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Dioxin/furans	2,3,7,8-TCDD	WB	3	2	0.000050	0.00010	0.000068	0.000039
Dioxin/furans	1,2,3,7,8-PeCDD	WB	3	3	0.00021	0.00028	0.00024	0.000036
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	3	1	0.000010	0.00017	0.000075	0.000085
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	3	2	0.00010	0.00026	0.00018	0.00011
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3	2	0.00010	0.00017	0.00011	0.000060
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	3	3	0.00040	0.00060	0.00049	0.00010
Dioxin/furans	OCDD	WB	3	3	0.0013	0.0017	0.0015	0.00023
Dioxin/furans	2,3,7,8-TCDF	WB	3	3	0.00058	0.00078	0.00067	0.00010
Dioxin/furans	1,2,3,7,8-PeCDF	WB	3	3	0.000080	0.00015	0.00011	0.000036
Dioxin/furans	2,3,4,7,8-PeCDF	WB	3	3	0.00010	0.00015	0.00013	0.000026
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3	2	0.000030	0.000090	0.000055	0.000031
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3	2	0.000050	0.00010	0.000065	0.000030
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3	3	0.000070	0.00020	0.00014	0.000066
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	3	3	0.00015	0.00021	0.00019	0.000032
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3	2	0.000010	0.00026	0.00017	0.00014
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3	2	0.000020	0.00011	0.000058	0.000046
Dioxin/furans	OCDF	WB	3	3	0.00010	0.00027	0.00021	0.000095
Guaiacols/Phenols	4-Chloroguaiacol	WB	3	0	740	830	390	25
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	3	0	740	830	390	25
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	3	0	740	830	390	25
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	3	0	740	830	390	25
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	3	0	740	830	390	25
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	3	0	290	330	150	9.9
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	3	0	740	830	390	25
Guaiacols/Phenols	Tetrachloroguaiacol	WB	3	0	290	330	150	9.9
Guaiacols/Phenols	2-Chlorophenol	WB	3	0	290	330	150	9.9
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	3	0	290	330	150	9.9
Guaiacols/Phenols	2,4-Dichlorophenol	WB	3	0	290	330	150	9.9
Guaiacols/Phenols	2,4-Dimethylphenol	WB	3	0	740	830	390	25
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	3	0	290	330	150	9.9
Guaiacols/Phenols	Pentachlorophenol	WB	3	0	290	330	150	9.9
Guaiacols/Phenols	Phenol	WB	3	0	290	330	150	9.9
Metals	Aluminum	WB	3	1	6,500	20,000	8,800	2,000
Metals	Antimony	WB	3	0	50	50	25	0.00
Metals	Arsenic	WB	3	3	860	930	890	32
Metals	Barium	WB	3	1	200	350	180	140
Metals	Beryllium	WB	3	0	4.0	4.0	2.0	0.00
Metals	Cadmium	WB	3	3	8.5	10	9.2	0.75
Metals	Chromium	WB	3	0	100	100	50	0.00
Metals	Cobalt	WB	3	3	6.3	7.9	7.1	0.80
Metals	Copper	WB	3	3	920	970	940	26
Metals	Lead	WB	3	3	370	680	500	160
Metals	Manganese	WB	3	3	480	520	500	22
Metals	Mercury	WB	3	0	35	42	19	1.8
Metals	Nickel	WB	3	3	34	67	50	17
Metals	Selenium	WB	3	3	270	300	290	15
Metals	Silver	WB	3	0	100	100	50	0.00
Metals	Thallium	WB	3	0	50	50	25	0.00
Metals	Vanadium	WB	3	2	20	22	17	6.4
Metals	Zinc	WB	3	3	13,000	14,000	14,000	900
PCBs	Aroclor 1016	WB	3	0	37	38	19	0.29
PCBs	Aroclor 1221	WB	3	0	37	38	19	0.29
PCBs	Aroclor 1232	WB	3	0	37	38	19	0.29
PCBs	Aroclor 1242	WB	3	0	37	38	19	0.29
PCBs	Aroclor 1248	WB	3	0	37	38	19	0.29
PCBs	Aroclor 1254	WB	3	0	37	38	19	0.29
PCBs	Aroclor 1260	WB	3	0	37	38	19	0.29
PCBs	PCB 77	WB	3	3	0.0081	0.0083	0.0082	0.00012
PCBs	PCB 105	WB	3	3	0.15	0.15	0.15	0.0026
PCBs	PCB 114	WB	3	3	0.010	0.011	0.011	0.00051
PCBs	PCB 118	WB	3	3	0.28	0.29	0.29	0.0032
PCBs	PCB 123	WB	3	3	0.010	0.012	0.011	0.00087
PCBs	PCB 126	WB	3	0	0.0017	0.0021	0.00095	0.00012
PCBs	PCB 156	WB	3	3	0.028	0.030	0.029	0.0013
PCBs	PCB 157	WB	3	3	0.0081	0.0095	0.0087	0.00068
PCBs	PCB 167	WB	3	3	0.017	0.018	0.018	0.00068
PCBs	PCB 169	WB	3	0	0.00050	0.00055	0.00026	0.000014
PCBs	PCB 170	WB	3	3	0.058	0.064	0.062	0.0034
PCBs	PCB 180	WB	3	3	0.17	0.18	0.18	0.0074
PCBs	PCB 189	WB	3	3	0.0023	0.0025	0.0024	0.000075
Pesticides	Aldrin	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	Alpha-BHC	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	Alpha-Chlordane	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	Beta-BHC	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	cis-Nonachlor	WB	3	0	3.7	3.8	1.9	0.029

Appendix D-3: Basin Summary Statistics
Eulachon

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Pesticides	DDD-o,p'	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	DDE-o,p'	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	DDT-o,p'	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	DDD-p,p'	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	DDE-p,p'	WB	3	3	9.8	11	11	0.69
Pesticides	DDT-p,p'	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	DDMU	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	Delta-BHC	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	Endosulfan Sulfate	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	Gamma-Chlordane	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	Gamma-Chlordene	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	Heptachlor	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	Heptachlor Epoxide	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	Hexachlorobenzene	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	Lindane	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	Mirex	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	Oxychlordane	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	Pentachloroanisol	WB	3	0	3.7	3.8	1.9	0.029
Pesticides	Toxaphene	WB	3	0	110	110	55	0.00
Pesticides	trans-Nonachlor	WB	3	0	3.7	3.8	1.9	0.029
Semivolatiles	1,2,4-Trichlorobenzene	WB	3	0	7.3	8.3	3.9	0.26
Semivolatiles	1,2-Diphenylhydrazine	WB	3	0	150	170	77	5.1
Semivolatiles	2,4-Dinitrotoluene	WB	3	0	290	330	150	9.9
Semivolatiles	2,6-Dinitrotoluene	WB	3	0	590	660	310	20
Semivolatiles	2-Chloronaphthalene	WB	3	0	150	170	77	5.1
Semivolatiles	4-Bromophenyl-Phenylether	WB	3	0	150	170	77	5.1
Semivolatiles	4-Chlorophenyl-Phenylether	WB	3	0	150	170	77	5.1
Semivolatiles	Acenaphthene	WB	3	0	290	330	150	9.9
Semivolatiles	Acenaphthylene	WB	3	0	150	170	77	5.1
Semivolatiles	Anthracene	WB	3	0	150	170	77	5.1
Semivolatiles	Benzene, 1,2-dichloro-	WB	3	0	7.3	8.3	3.9	0.26
Semivolatiles	Benzene, 1,3-dichloro-	WB	3	0	7.3	8.3	3.9	0.26
Semivolatiles	Benzene, 1,4-dichloro-	WB	3	0	7.3	8.3	3.9	0.26
Semivolatiles	Benzo(a)anthracene	WB	3	0	150	170	77	5.1
Semivolatiles	Benzo(a)pyrene	WB	3	0	150	170	77	5.1
Semivolatiles	Benzo(g,h,i)perylene	WB	3	0	290	330	150	9.9
Semivolatiles	Benzo[b]Fluoranthene	WB	3	0	290	330	150	9.9
Semivolatiles	Benzo[k]fluoranthene	WB	3	0	290	330	150	9.9
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	3	0	15	17	7.7	0.51
Semivolatiles	Chrysene	WB	3	0	150	170	77	5.1
Semivolatiles	Dibenz[a,h]anthracene	WB	3	0	290	330	150	9.9
Semivolatiles	Dibenzofuran	WB	3	0	150	170	77	5.1
Semivolatiles	Fluoranthene	WB	3	0	150	330	130	49
Semivolatiles	9H-Fluorene	WB	3	1	9.4	170	56	40
Semivolatiles	Hexachlorobutadiene	WB	3	0	7.3	8.3	3.9	0.26
Semivolatiles	Hexachloroethane	WB	3	0	7.3	8.3	3.9	0.26
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	3	0	290	330	150	9.9
Semivolatiles	Naphthalene	WB	3	0	30	40	18	2.5
Semivolatiles	Naphthalene, 1-methyl-	WB	3	0	7.3	8.3	3.9	0.26
Semivolatiles	Naphthalene, 2-methyl-	WB	3	1	7.8	11	6.4	4.0
Semivolatiles	Nitrobenzene	WB	3	0	7.5	17	5.5	2.6
Semivolatiles	Phenanthrene	WB	3	1	21	170	60	34
Semivolatiles	Pyrene	WB	3	0	290	330	150	9.9
Semivolatiles	Retene	WB	3	0	290	330	150	9.9

Appendix D-3: Basin Summary Statistics
Pacific Lamprey

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Dioxin/furans	2,3,7,8-TCDD	FS	3	1	0.000010	0.000060	0.000027	0.000029
Dioxin/furans	2,3,7,8-TCDD	WB	9	3	0.000020	0.000070	0.000029	0.000024
Dioxin/furans	1,2,3,7,8-PeCDD	FS	3	2	0.000040	0.00017	0.00011	0.000078
Dioxin/furans	1,2,3,7,8-PeCDD	WB	9	5	0.000020	0.00015	0.000077	0.000065
Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	3	2	0.000040	0.00011	0.000077	0.000049
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	9	4	0.000010	0.00013	0.000048	0.000050
Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3	3	0.00016	0.00021	0.00018	0.000026
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	9	7	0.000020	0.00025	0.00015	0.000084
Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3	2	0.000040	0.000070	0.000047	0.000025
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	9	5	0.000010	0.000070	0.000036	0.000027
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3	2	0.00010	0.00028	0.00019	0.00013
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	9	9	0.00021	0.00028	0.00024	0.000021
Dioxin/furans	OCDD	FS	3	3	0.00030	0.00043	0.00037	0.000066
Dioxin/furans	OCDD	WB	9	8	0.000020	0.00099	0.00043	0.00027
Dioxin/furans	2,3,7,8-TCDF	FS	3	3	0.0012	0.0017	0.0014	0.00027
Dioxin/furans	2,3,7,8-TCDF	WB	9	9	0.0011	0.0032	0.0020	0.00079
Dioxin/furans	1,2,3,7,8-PeCDF	FS	3	1	0.000020	0.00032	0.00012	0.00018
Dioxin/furans	1,2,3,7,8-PeCDF	WB	9	9	0.00018	0.00047	0.00032	0.000100
Dioxin/furans	2,3,4,7,8-PeCDF	FS	3	3	0.00010	0.00013	0.00011	0.000015
Dioxin/furans	2,3,4,7,8-PeCDF	WB	9	5	0.000010	0.00016	0.000086	0.000055
Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	3	2	0.000010	0.00012	0.000082	0.000066
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	9	8	0.000010	0.00019	0.00011	0.000054
Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	3	3	0.000080	0.00010	0.000087	0.000012
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	9	7	0.000010	0.00016	0.00010	0.000058
Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3	2	0.000040	0.000060	0.000043	0.000021
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	9	4	0.000020	0.000070	0.000036	0.000024
Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3	3	0.000080	0.00020	0.00016	0.000069
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	9	6	0.000010	0.00019	0.00010	0.000077
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	3	0	0.000010	0.000070	0.000017	0.000016
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	9	5	0.000010	0.00010	0.000056	0.000039
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	3	0	0.000010	0.000070	0.000017	0.000016
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	9	3	0.000010	0.000060	0.000016	0.0000098
Dioxin/furans	OCDF	FS	3	0	0.000020	0.00011	0.000027	0.000025
Dioxin/furans	OCDF	WB	9	6	0.000020	0.000090	0.000046	0.000030
Guaiacols/Phenols	4-Chloroguaiacol	FS	3	0	2,400	2,500	1,200	18
Guaiacols/Phenols	4-Chloroguaiacol	WB	9	0	500	4,500	850	620
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	3	0	2,400	2,500	1,200	18
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	9	0	500	4,500	850	620
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	3	0	2,400	2,500	1,200	18
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	9	0	500	4,500	850	620
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	3	0	2,400	2,500	1,200	18
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	9	0	500	4,500	850	620
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	3	0	2,400	2,500	1,200	18
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	9	0	500	4,500	850	620
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	3	0	970	1,000	490	7.3
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	9	0	200	1,800	340	250
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	3	0	2,400	2,500	1,200	18
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	9	0	500	4,500	850	620
Guaiacols/Phenols	Tetrachloroguaiacol	FS	3	0	970	1,000	490	7.3
Guaiacols/Phenols	Tetrachloroguaiacol	WB	9	0	200	1,800	340	250
Guaiacols/Phenols	2-Chlorophenol	FS	3	0	970	1,000	490	7.3
Guaiacols/Phenols	2-Chlorophenol	WB	9	0	200	1,800	340	250
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	3	0	970	1,000	490	7.3
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	9	0	200	1,800	340	250
Guaiacols/Phenols	2,4-Dichlorophenol	FS	3	0	970	1,000	490	7.3
Guaiacols/Phenols	2,4-Dichlorophenol	WB	9	0	200	1,800	340	250
Guaiacols/Phenols	2,4-Dimethylphenol	FS	3	0	2,400	2,500	1,200	18
Guaiacols/Phenols	2,4-Dimethylphenol	WB	9	0	500	4,500	850	620
Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	3	0	970	1,000	490	7.3
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	6	0	200	1,800	400	290
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	3	0	970	1,000	490	7.3
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	9	0	200	1,800	340	250
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	3	0	970	1,000	490	7.3
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	6	0	200	1,800	400	290
Guaiacols/Phenols	Pentachlorophenol	FS	3	0	970	1,000	490	7.3
Guaiacols/Phenols	Pentachlorophenol	WB	9	0	200	1,800	340	250
Guaiacols/Phenols	Phenol	FS	3	0	970	1,000	490	7.3
Guaiacols/Phenols	Phenol	WB	9	0	200	1,800	340	250
Metals	Aluminum	FS	3	0	1,000	1,000	500	0.00
Metals	Aluminum	WB	9	4	1,000	2,200	1,200	840
Metals	Antimony	FS	3	0	50	50	25	0.00
Metals	Antimony	WB	9	0	50	50	25	0.00
Metals	Arsenic	FS	3	3	280	360	310	42
Metals	Arsenic	WB	9	9	150	370	260	83
Metals	Barium	FS	3	0	200	200	100	0.00
Metals	Barium	WB	9	0	200	200	100	0.00

Appendix D-3: Basin Summary Statistics
Pacific Lamprey

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Metals	Beryllium	FS	3	0	4.0	4.0	2.0	0.00
Metals	Beryllium	WB	9	0	4.0	4.0	2.0	0.00
Metals	Cadmium	FS	3	3	16	30	24	7.1
Metals	Cadmium	WB	9	9	56	150	110	37
Metals	Chromium	FS	3	1	100	140	80	52
Metals	Chromium	WB	9	4	100	290	100	80
Metals	Cobalt	FS	3	3	10	79	33	40
Metals	Cobalt	WB	9	9	13	390	96	120
Metals	Copper	FS	3	3	1,100	1,400	1,200	140
Metals	Copper	WB	9	9	3,700	5,500	4,500	670
Metals	Lead	FS	3	0	10	10	5.0	0.00
Metals	Lead	WB	9	3	10	69	16	22
Metals	Manganese	FS	3	3	370	390	380	13
Metals	Manganese	WB	9	9	250	540	390	110
Metals	Mercury	FS	3	0	110	110	54	1.7
Metals	Mercury	WB	9	7	91	260	120	64
Metals	Nickel	FS	3	0	30	30	15	0.00
Metals	Nickel	WB	9	4	30	570	110	180
Metals	Selenium	FS	3	3	410	450	430	20
Metals	Selenium	WB	9	9	520	760	580	69
Metals	Silver	FS	3	0	100	100	50	0.00
Metals	Silver	WB	9	0	100	100	50	0.00
Metals	Thallium	FS	3	0	50	50	25	0.00
Metals	Thallium	WB	9	0	50	50	25	0.00
Metals	Vanadium	FS	3	2	10	12	9.7	4.0
Metals	Vanadium	WB	9	9	34	45	40	3.5
Metals	Zinc	FS	3	3	19,000	21,000	20,000	1,100
Metals	Zinc	WB	9	9	18,000	27,000	22,000	2,600
PCBs	Aroclor 1016	FS	3	0	19	20	9.7	0.29
PCBs	Aroclor 1016	WB	9	0	19	29	11	1.8
PCBs	Aroclor 1221	FS	3	0	19	20	9.7	0.29
PCBs	Aroclor 1221	WB	9	0	19	29	11	1.8
PCBs	Aroclor 1232	FS	3	0	19	20	9.7	0.29
PCBs	Aroclor 1232	WB	9	0	19	29	11	1.8
PCBs	Aroclor 1242	FS	3	0	19	20	9.7	0.29
PCBs	Aroclor 1242	WB	9	0	19	29	11	1.8
PCBs	Aroclor 1248	FS	3	0	19	20	9.7	0.29
PCBs	Aroclor 1248	WB	9	0	19	29	11	1.8
PCBs	Aroclor 1254	FS	3	3	80	100	87	11
PCBs	Aroclor 1254	WB	9	9	60	150	92	33
PCBs	Aroclor 1260	FS	3	0	19	20	9.7	0.29
PCBs	Aroclor 1260	WB	9	3	13	20	11	2.3
PCBs	PCB 77	FS	3	3	0.022	0.024	0.023	0.00085
PCBs	PCB 77	WB	9	9	0.018	0.037	0.027	0.0061
PCBs	PCB 105	FS	3	3	1.1	1.4	1.2	0.13
PCBs	PCB 105	WB	9	9	0.81	2.0	1.2	0.43
PCBs	PCB 114	FS	3	3	0.13	0.15	0.14	0.0075
PCBs	PCB 114	WB	9	9	0.10	0.21	0.14	0.032
PCBs	PCB 118	FS	3	3	3.4	3.8	3.6	0.21
PCBs	PCB 118	WB	9	9	2.4	5.5	3.5	1.2
PCBs	PCB 123	FS	3	3	0.047	0.070	0.058	0.012
PCBs	PCB 123	WB	9	9	0.033	0.068	0.048	0.014
PCBs	PCB 126	FS	3	3	0.014	0.019	0.016	0.0027
PCBs	PCB 126	WB	9	9	0.011	0.031	0.022	0.0077
PCBs	PCB 156	FS	3	3	0.26	0.30	0.27	0.022
PCBs	PCB 156	WB	9	9	0.20	0.46	0.32	0.083
PCBs	PCB 157	FS	3	3	0.045	0.057	0.051	0.0059
PCBs	PCB 157	WB	9	6	0.0020	0.094	0.041	0.035
PCBs	PCB 167	FS	3	3	0.16	0.17	0.17	0.0040
PCBs	PCB 167	WB	9	9	0.13	0.28	0.19	0.049
PCBs	PCB 169	FS	3	0	0.0010	0.0010	0.00050	0.00
PCBs	PCB 169	WB	9	0	0.0010	0.0100	0.0015	0.0015
PCBs	PCB 170	FS	3	3	0.42	0.48	0.46	0.036
PCBs	PCB 170	WB	9	9	0.26	0.70	0.43	0.17
PCBs	PCB 180	FS	3	3	1.5	1.7	1.6	0.070
PCBs	PCB 180	WB	9	9	0.90	2.4	1.5	0.57
PCBs	PCB 189	FS	3	3	0.019	0.020	0.020	0.00045
PCBs	PCB 189	WB	9	9	0.014	0.028	0.021	0.0049
Pesticides	Aldrin	FS	3	0	1.9	2.0	0.97	0.029
Pesticides	Aldrin	WB	9	0	1.9	3.6	1.2	0.33
Pesticides	Alpha-BHC	FS	3	0	1.9	2.0	0.97	0.029
Pesticides	Alpha-BHC	WB	9	0	1.9	3.6	1.2	0.33
Pesticides	Alpha-Chlordene	FS	3	0	1.9	2.0	0.97	0.029
Pesticides	Alpha-Chlordene	WB	9	0	1.9	3.6	1.2	0.33
Pesticides	Beta-BHC	FS	3	0	1.9	2.0	0.97	0.029
Pesticides	Beta-BHC	WB	9	0	1.9	3.6	1.2	0.33

Appendix D-3: Basin Summary Statistics
Pacific Lamprey

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Pesticides	cis-Chlordane (alpha-Chlordane)	FS	3	3	7.3	11	9.2	1.9
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	9	6	2.6	18	6.9	5.7
Pesticides	cis-Nonachlor	FS	3	3	8.5	11	9.7	1.3
Pesticides	cis-Nonachlor	WB	9	6	2.6	15	7.5	5.2
Pesticides	DDD-o,p'	FS	3	0	1.9	2.0	0.97	0.029
Pesticides	DDD-o,p'	WB	9	4	1.5	4.8	2.4	1.6
Pesticides	DDE-o,p'	FS	3	3	4.3	4.8	4.5	0.26
Pesticides	DDE-o,p'	WB	9	8	2.0	8.5	4.6	2.2
Pesticides	DDT-o,p'	FS	3	0	1.9	2.0	0.97	0.029
Pesticides	DDT-o,p'	WB	9	2	1.9	3.6	1.5	0.70
Pesticides	DDD-p,p'	FS	3	3	4.8	9.3	7.7	2.5
Pesticides	DDD-p,p'	WB	9	9	3.2	25	12	8.7
Pesticides	DDE-p,p'	FS	3	3	46	55	50	4.6
Pesticides	DDE-p,p'	WB	9	9	35	77	53	15
Pesticides	DDT-p,p'	FS	3	3	28	38	31	5.8
Pesticides	DDT-p,p'	WB	9	9	6.3	29	16	8.8
Pesticides	DDMU	FS	3	3	3.6	5.6	4.5	1.0
Pesticides	DDMU	WB	9	6	2.6	6.9	3.9	2.0
Pesticides	Delta-BHC	FS	3	0	1.9	2.0	0.97	0.029
Pesticides	Delta-BHC	WB	9	0	1.9	3.6	1.2	0.33
Pesticides	Endosulfan Sulfate	FS	3	0	0.00	0.00	0.00	na
Pesticides	Endosulfan Sulfate	WB	9	0	0.00	3.6	1.6	0.26
Pesticides	Gamma-Chlordane	FS	3	2	1.3	2.5	1.6	0.79
Pesticides	Gamma-Chlordane	WB	9	4	1.5	3.6	1.9	0.78
Pesticides	Gamma-Chlordene	FS	3	0	1.9	2.0	0.97	0.029
Pesticides	Gamma-Chlordene	WB	9	0	1.9	3.6	1.2	0.33
Pesticides	Heptachlor	FS	3	0	1.9	2.0	0.97	0.029
Pesticides	Heptachlor	WB	9	0	1.9	3.6	1.2	0.33
Pesticides	Heptachlor Epoxide	FS	3	0	1.9	2.0	0.97	0.029
Pesticides	Heptachlor Epoxide	WB	9	0	3.6	3.6	1.3	0.37
Pesticides	Hexachlorobenzene	FS	3	3	7.1	8.0	7.6	0.46
Pesticides	Hexachlorobenzene	WB	9	6	2.6	11	6.3	3.9
Pesticides	Lindane	FS	3	0	1.9	2.0	0.97	0.029
Pesticides	Lindane	WB	9	0	1.9	3.6	1.2	0.33
Pesticides	Mirex	FS	3	0	1.9	2.0	0.97	0.029
Pesticides	Mirex	WB	9	0	1.9	3.6	1.2	0.33
Pesticides	Oxychlordane	FS	3	0	1.9	2.0	0.97	0.029
Pesticides	Oxychlordane	WB	9	3	1.9	5.7	2.6	2.0
Pesticides	Pentachloroanisol	FS	3	3	1.5	1.7	1.6	0.10
Pesticides	Pentachloroanisol	WB	9	6	1.1	3.6	1.4	0.24
Pesticides	Toxaphene	FS	3	0	57	60	29	0.87
Pesticides	Toxaphene	WB	8	0	56	110	34	9.3
Pesticides	trans-Nonachlor	FS	3	3	21	24	22	1.5
Pesticides	trans-Nonachlor	WB	9	6	2.6	25	14	9.7
Semivolatiles	1,2,4-Trichlorobenzene	FS	3	0	24	25	12	0.20
Semivolatiles	1,2,4-Trichlorobenzene	WB	9	0	5.0	25	6.5	3.5
Semivolatiles	1,2-Diphenylhydrazine	FS	3	0	24	25	12	0.20
Semivolatiles	1,2-Diphenylhydrazine	WB	9	0	5.0	25	6.5	3.5
Semivolatiles	2,4-Dinitrotoluene	FS	3	0	49	50	25	0.38
Semivolatiles	2,4-Dinitrotoluene	WB	9	0	10	50	13	7.0
Semivolatiles	2,6-Dinitrotoluene	FS	3	0	97	100	49	0.73
Semivolatiles	2,6-Dinitrotoluene	WB	9	0	20	100	26	14
Semivolatiles	2-Chloronaphthalene	FS	3	0	49	50	25	0.38
Semivolatiles	2-Chloronaphthalene	WB	9	0	10	50	13	7.0
Semivolatiles	4-Bromophenyl-Phenylether	FS	3	0	24	25	12	0.20
Semivolatiles	4-Bromophenyl-Phenylether	WB	9	0	5.0	25	6.5	3.5
Semivolatiles	4-Chlorophenyl-Phenylether	FS	3	0	24	25	12	0.20
Semivolatiles	4-Chlorophenyl-Phenylether	WB	9	0	5.0	25	6.5	3.5
Semivolatiles	Acenaphthene	FS	3	0	49	50	25	0.38
Semivolatiles	Acenaphthene	WB	9	0	10	50	13	6.9
Semivolatiles	Acenaphthylene	FS	3	0	24	25	12	0.20
Semivolatiles	Acenaphthylene	WB	9	0	5.0	25	6.5	3.5
Semivolatiles	Anthracene	FS	3	0	24	25	12	0.20
Semivolatiles	Anthracene	WB	9	0	5.0	25	6.5	3.5
Semivolatiles	Benzene, 1,2-dichloro-	FS	3	0	24	25	12	0.20
Semivolatiles	Benzene, 1,2-dichloro-	WB	9	0	5.0	25	6.5	3.5
Semivolatiles	Benzene, 1,3-dichloro-	FS	3	0	24	25	12	0.20
Semivolatiles	Benzene, 1,3-dichloro-	WB	9	0	5.0	25	6.5	3.5
Semivolatiles	Benzene, 1,4-dichloro-	FS	3	0	24	25	12	0.20
Semivolatiles	Benzene, 1,4-dichloro-	WB	9	0	5.0	25	6.5	3.5
Semivolatiles	Benzo(a)anthracene	FS	3	0	24	25	12	0.20
Semivolatiles	Benzo(a)anthracene	WB	9	0	5.0	25	6.5	3.5
Semivolatiles	Benzo(a)pyrene	FS	3	0	24	25	12	0.20
Semivolatiles	Benzo(a)pyrene	WB	9	0	5.0	49	8.7	6.9
Semivolatiles	Benzo(g,h,i)perylene	FS	3	0	49	50	25	0.38
Semivolatiles	Benzo(g,h,i)perylene	WB	9	0	10	98	17	14

Appendix D-3: Basin Summary Statistics
Pacific Lamprey

Chemical Group	Chemical	Sample Type	Number of Samples	Detection frequency	Minimum	Maximum	Average (ug/kg)	Standard Deviation
Semivolatiles	Benzo[b]Fluoranthene	FS	3	0	24	25	12	0.20
Semivolatiles	Benzo[b]Fluoranthene	WB	9	0	5.0	49	8.7	6.9
Semivolatiles	Benzo[k]fluoranthene	FS	3	0	24	25	12	0.20
Semivolatiles	Benzo[k]fluoranthene	WB	9	0	5.0	49	8.7	6.9
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	3	0	49	50	25	0.38
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	9	0	10	50	13	7.0
Semivolatiles	Chrysene	FS	3	0	24	25	12	0.20
Semivolatiles	Chrysene	WB	9	0	5.0	25	6.5	3.5
Semivolatiles	Dibenz[a,h]anthracene	FS	3	0	49	50	25	0.38
Semivolatiles	Dibenz[a,h]anthracene	WB	9	0	10	98	17	14
Semivolatiles	Dibenzofuran	FS	3	0	24	25	12	0.20
Semivolatiles	Dibenzofuran	WB	9	0	5.0	25	6.5	3.5
Semivolatiles	Fluoranthene	FS	3	0	49	50	25	0.38
Semivolatiles	Fluoranthene	WB	9	1	10	50	14	7.0
Semivolatiles	9H-Fluorene	FS	3	0	24	25	12	0.20
Semivolatiles	9H-Fluorene	WB	9	0	5.0	25	6.5	3.5
Semivolatiles	Hexachlorobutadiene	FS	3	0	24	25	12	0.20
Semivolatiles	Hexachlorobutadiene	WB	9	0	5.0	25	6.5	3.5
Semivolatiles	Hexachloroethane	FS	3	0	24	25	12	0.20
Semivolatiles	Hexachloroethane	WB	9	0	5.0	25	6.5	3.5
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	3	0	49	50	25	0.38
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	9	0	10	98	17	14
Semivolatiles	Naphthalene	FS	3	0	54	85	33	8.2
Semivolatiles	Naphthalene	WB	9	0	9.1	59	16	7.9
Semivolatiles	Naphthalene, 1-methyl-	FS	3	0	24	26	13	0.38
Semivolatiles	Naphthalene, 1-methyl-	WB	9	4	9.1	25	12	5.6
Semivolatiles	Naphthalene, 2-methyl-	FS	3	1	49	77	42	30
Semivolatiles	Naphthalene, 2-methyl-	WB	9	4	9.1	44	22	15
Semivolatiles	Nitrobenzene	FS	3	0	24	25	12	0.20
Semivolatiles	Nitrobenzene	WB	9	0	5.0	25	6.5	3.5
Semivolatiles	Phenanthrene	FS	3	0	24	25	12	0.20
Semivolatiles	Phenanthrene	WB	9	3	7.3	25	9.5	4.7
Semivolatiles	Pyrene	FS	3	0	49	50	25	0.38
Semivolatiles	Pyrene	WB	9	0	10	50	13	7.0
Semivolatiles	Retene	FS	3	0	49	50	25	0.38
Semivolatiles	Retene	WB	9	0	10	50	13	7.0



Region 10, 1200 Sixth Avenue, Seattle WA 98101

**COLUMBIA RIVER BASIN FISH
CONTAMINANT SURVEY**

**VOLUME 1
Appendix E**

**Chemical Concentrations for Three
Detection Limit Rules**

July 2002

**Prepared by
U.S. Environmental Protection Agency
Region 10
Seattle, Washington**

Appendix E-1. Bridgelip Sucker chemical tissue concentrations (basin average) at full detection limit and at the detection limit set at zero.

	Full Detection Limit	Zero Detection Limit
Basin Average of WHOLE BODY concentraton (ug/kg)		
Chemical	Total	Total
1,2,3,4,6,7,8-HpCDD	0.000396667	0.000397
1,2,3,4,6,7,8-HpCDF	0.00008	7.67E-05
1,2,3,4,7,8,9-HpCDF	0.00001	0
1,2,3,4,7,8-HxCDD	0.000123333	0.000123
1,2,3,4,7,8-HxCDF	0.00002	0.00002
1,2,3,6,7,8-HxCDD	0.00015	0.00015
1,2,3,6,7,8-HxCDF	3.33333E-05	3.33E-05
1,2,3,7,8,9-HxCDD	5.33333E-05	5.33E-05
1,2,3,7,8,9-HxCDF	5.66667E-05	5.67E-05
1,2,3,7,8-PeCDD	0.00018	0.00018
1,2,3,7,8-PeCDF	5.33333E-05	5.33E-05
1,2,4-Trichlorobenzene	7.833333333	0
1,2-Diphenylhydrazine	9.166666667	4.666667
2,3,4,6,7,8-HxCDF	0.00014	0.00014
2,3,4,7,8-PeCDF	0.000116667	0.000117
2,3,7,8-TCDD	0.00007	0.00007
2,3,7,8-TCDF	0.00096	0.00096
2,4,6-Trichlorophenol	314	0
2,4-Dichlorophenol	314	0
2,4-Dimethylphenol	785	0
2,4-Dinitrotoluene	15.7	0
2,6-Dinitrotoluene	31.4	0
2-Chloronaphthalene	15.7	0
2-Chlorophenol	314	0
3,4,5-Trichloroguaiacol	785	0
3,4,6-Trichloroguaiacol	314	0
3,4-Dichloroguaiacol	785	0
4,5,6-Trichloroguaiacol	785	0
4,5-Dichloroguaiacol	785	0
4,6-Dichloroguaiacol	785	0
4-Bromophenyl-Phenylether	7.833333333	0
4-Chloro-3-methylphenol	314	0
4-Chloroguaiacol	785	0
4-Chlorophenyl-Phenylether	7.833333333	0
9H-Fluorene	7.833333333	0
Acenaphthene	15.7	0
Acenaphthylene	7.833333333	0
Aldrin	3.033333333	0
Alpha-BHC	3.033333333	0
Alpha-Chlordene	3.033333333	0
Aluminum	36700	36700
Anthracene	7.833333333	0
Antimony	50	0
Arsenic	283.3333333	283.3333

Appendix E-1. Bridgelip Sucker chemical tissue concentrations (basin average) at full detection limit and at the detection limit set at zero.

	Full Detection Limit	Zero Detection Limit
Basin Average of WHOLE BODY concentraton (ug/kg)		
Chemical	Total	Total
Barium	2033.333333	2033.333
Benzene, 1,2-dichloro-	7.833333333	0
Benzene, 1,3-dichloro-	7.833333333	0
Benzene, 1,4-dichloro-	7.833333333	0
Benzo(a)anthracene	7.833333333	0
Benzo(a)pyrene	7.833333333	0
Benzo(g,h,i)perylene	15.7	0
Benzo[b]Fluoranthene	7.833333333	0
Benzo[k]fluoranthene	7.833333333	0
Beryllium	6	4.666667
Beta-BHC	3.033333333	0
bis(2-Chloroisopropyl)ether	15.7	0
Cadmium	28.66666667	28.66667
Chromium	176.6666667	176.6667
Chrysene	7.833333333	0
cis-Chlordane (alpha-Chlordane)	3.033333333	0
cis-Nonachlor	3.033333333	0
Cobalt	96.33333333	96.33333
Copper	1222.666667	1222.667
DDMU	15.66666667	15.66667
Delta-BHC	3.033333333	0
Dibenz[a,h]anthracene	15.7	0
Dibenzofuran	7.833333333	0
Endosulfan Sulfate	4.633333333	4.633333
Fluoranthene	15.7	0
Gamma-Chlordane	3.033333333	0
Gamma-Chlordene	3.033333333	0
Heptachlor	3.033333333	0
Heptachlor Epoxide	3.033333333	0
Hexachlorobenzene	3.033333333	0
Hexachlorobutadiene	7.833333333	0
Hexachloroethane	7.833333333	0
Indeno(1,2,3-cd)pyrene	15.7	0
Lead	53.66666667	53.66667
Lindane	3.033333333	0
Manganese	17600	17600
Mercury	45.33333333	17.66667
Mirex	3.033333333	0
Naphthalene	20.63333333	0
Naphthalene, 1-methyl-	7.933333333	2.5
Naphthalene, 2-methyl-	16.06666667	16.06667
Nickel	395.6666667	395.6667
Nitrobenzene	7.833333333	0
n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!

Appendix E-1. Bridgelip Sucker chemical tissue concentrations (basin average) at full detection limit and at the detection limit set at zero.

	Full Detection Limit	Zero Detection Limit
Basin Average of WHOLE BODY concentraton (ug/kg)		
Chemical	Total	Total
OCDD	0.000893333	0.000893
OCDF	6.66667E-05	6.67E-05
Oxychlordane	3.033333333	0
PCB 105	0.565	0.565
PCB 114	0.046866667	0.046867
PCB 118	1.133333333	1.133333
PCB 123	0.030366667	0.030367
PCB 126	0.005496667	0.004033
PCB 156	0.302	0.302
PCB 157	0.005553333	0
PCB 167	0.150333333	0.150333
PCB 169	0.002453333	0.001937
PCB 170	0.944	0.944
PCB 180	2.783333333	2.783333
PCB 189	0.0346	0.0346
Pentachloroanisol	3.033333333	0
Pentachlorophenol	314	0
Phenanthrene	7.833333333	0
Phenol	314	0
Pyrene	15.7	0
Retene	15.7	0
Selenium	280	280
Silver	100	0
Tetrachloroguaiacol	314	0
Thallium	50	0
Toxaphene	82.66666667	0
trans-Nonachlor	3.033333333	0
Vanadium	190.6666667	190.6667
Zinc	20066.66667	20066.67
Aroclor 1016	22	0
Aroclor 1221	22	0
Aroclor 1232	22	0
Aroclor 1242	22	0
Aroclor 1248	22	0
Aroclor 1254	25.33333333	25.33333
Aroclor 1260	34.33333333	34.33333
PCB 077	0.034233333	0.034233
DDD-o,p'	9.9	9.9
DDE-o,p'	6.8	6.8
DDT-o,p'	3.033333333	0
DDD-p,p'	65	65
DDE-p,p'	400	400
DDT-p,p'	46.33333333	46.33333

Appendix E-2. Channel Catfish tissue concentration site data (ug/kg) at full detection limits and with the detection limits set at zero.

Station	Chemical	Detection limits and tissue sample types			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
Sta. 8	1,2,3,4,6,7,8-HpCDD	0.000855	0.000647	0.000855	0.000647
	1,2,3,4,6,7,8-HpCDF	0	0	0.000035	0.00002
	1,2,3,4,7,8,9-HpCDF	0	0	0.000035	0.00002
	1,2,3,4,7,8-HxCDD	0.00022	0.000207	0.00022	0.000207
	1,2,3,4,7,8-HxCDF	0.000045	0.00005	0.000055	0.00005
	1,2,3,6,7,8-HxCDD	0.00082	0.000768	0.00082	0.000768
	1,2,3,6,7,8-HxCDF	0.00004	0.00002	0.00004	0.00003
	1,2,3,7,8,9-HxCDD	0.000155	0.00013	0.000155	0.00013
	1,2,3,7,8,9-HxCDF	0	0	0.00002	1.67E-05
	1,2,3,7,8-PeCDD	0.00053	0.00047	0.00053	0.00047
	1,2,3,7,8-PeCDF	0.00026	0.000203	0.00026	0.000203
	1,2,4-Trichlorobenzene	0	0	9.2	9.633333
	1,2-Diphenylhydrazine	0	0	9.2	9.633333
	2,3,4,6,7,8-HxCDF	0.00005	0.00004	0.00005	4.33E-05
	2,3,4,6-Tetrachlorophenol	0	0	369	386.6667
	2,3,4,7,8-PeCDF	0.00059	0.000447	0.00059	0.000447
	2,3,7,8-TCDD	0.001205	0.000873	0.001205	0.000873
	2,3,7,8-TCDF	0.00277	0.002463	0.00277	0.002463
	2,4,5-Trichlorophenol	0	0	369	386.6667
	2,4,6-Trichlorophenol	0	0	369	386.6667
	2,4-Dichlorophenol	0	0	369	386.6667
	2,4-Dimethylphenol	0	0	922.5	966.6667
	2,4-Dinitrotoluene	0	0	18.4	19.26667
	2,6-Dinitrotoluene	0	0	36.8	38.53333
	2-Chloronaphthalene	0	0	18.4	19.26667
	2-Chlorophenol	0	0	369	386.6667
	3,4,5-Trichloroguaiacol	0	0	922.5	966.6667
	3,4,6-Trichloroguaiacol	0	0	369	386.6667
	3,4-Dichloroguaiacol	0	0	922.5	966.6667
	4,5,6-Trichloroguaiacol	0	0	922.5	966.6667
	4,5-Dichloroguaiacol	0	0	922.5	966.6667
	4,6-Dichloroguaiacol	0	0	922.5	966.6667
	4-Bromophenyl-Phenylether	0	0	9.2	9.633333
	4-Chloro-3-methylphenol	0	0	369	386.6667
	4-Chloroguaiacol	0	0	922.5	966.6667
	4-Chlorophenyl-Phenylether	0	0	9.2	9.633333
	9H-Fluorene	0	0	9.2	9.633333
	Acenaphthene	0	0	18.4	19.26667
	Acenaphthylene	0	0	9.2	9.633333
	Aldrin	0	0	1.95	1.766667
	Alpha-BHC	0	0	1.95	1.766667
	Alpha-Chlordene	0	0	1.95	1.766667
	Aluminum	20950	4346.667	21450	4346.667
	Anthracene	0	0	9.2	9.633333
	Antimony	0	0	50	50
	Arsenic	165	326.6667	190	326.6667

Appendix E-2. Channel Catfish tissue concentration site data (ug/kg) at full detection limits and with the detection limits set at zero.

Station	Chemical	Detection limits and tissue sample types			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Barium	140	549.6667	240	549.6667
	Benzene, 1,2-dichloro-	0	0	9.2	9.633333
	Benzene, 1,3-dichloro-	0	0	9.2	9.633333
	Benzene, 1,4-dichloro-	0	0	9.2	9.633333
	Benzo(a)anthracene	0	0	9.2	9.633333
	Benzo(a)pyrene	0	0	9.2	22.7
	Benzo(g,h,i)perylene	0	5.1	18.4	44.23333
	Benzo[b]Fluoranthene	0	0	9.2	22.7
	Benzo[k]fluoranthene	0	0	9.2	22.7
	Beryllium	0	0	4	4
	Beta-BHC	0	0	1.95	1.766667
	bis(2-Chloroisopropyl)ether	0	0	18.4	19.26667
	Cadmium	0	13.66667	4	13.66667
	Chromium	120	230	120	230
	Chrysene	0	0	9.2	9.633333
	cis-Chlordane (alpha-Chlordane)	1.6	0.313333	2.6	1.513333
	cis-Nonachlor	3.6	2.5	3.6	2.5
	Cobalt	88.5	160.3333	88.5	160.3333
	Copper	355	509.3333	355	509.3333
	DDMU	8.75	7.7	8.75	7.7
	Delta-BHC	0	0	1.95	1.766667
	Dibenz[a,h]anthracene	0	0	18.4	45.4
	Dibenzofuran	0	0	9.2	9.633333
	Endosulfan Sulfate	0	0	1.95	1.766667
	Fluoranthene	0	0	18.4	19.26667
	Gamma-Chlordane	2.85	2.233333	2.85	2.233333
	gamma-Chlordene	0	0	1.95	1.766667
	Heptachlor	0	0	1.95	1.766667
	Heptachlor Epoxide	0	0	1.95	1.766667
	Hexachlorobenzene	5.2	5.1	5.2	5.1
	Hexachlorobutadiene	0	0	9.2	9.633333
	Hexachloroethane	0	0	9.2	9.633333
	Indeno(1,2,3-cd)pyrene	0	0	18.4	45.4
	Lead	5.5	16.33333	10.5	16.33333
	Lindane	0	0	1.95	1.766667
	Manganese	135	1590	135	1590
	Mercury	241	230	241	230
	Mirex	4.35	5.633333	4.35	5.633333
	Naphthalene	0	0	25.6	22.93333
	Naphthalene, 1-methyl-	0	0	9.2	9.633333
	Naphthalene, 2-methyl-	0	0	9.2	9.633333
	Nickel	0	92.33333	30	92.33333
	Nitrobenzene	0	0	9.2	9.633333
	n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	0.00081	0.00074	0.00081	0.00074
	OCDF	0.00006	1.67E-05	0.00006	2.33E-05

Appendix E-2. Channel Catfish tissue concentration site data (ug/kg) at full detection limits and with the detection limits set at zero.

Station	Chemical	Detection limits and tissue sample types			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
Sta. 48	Oxychlordan	2.05	1.6	2.05	2.133333
	PCB 105	2.965	2.266667	2.965	2.266667
	PCB 114	0.305	0.226667	0.305	0.226667
	PCB 118	6.805	4.936667	6.805	4.936667
	PCB 123	0.13685	0.106567	0.13685	0.106567
	PCB 126	0.00685	0.0123	0.007705	0.01288
	PCB 156	1.403	1.037	1.403	1.037
	PCB 157	0.2605	0.1946	0.2605	0.1946
	PCB 167	0.5485	0.397333	0.5485	0.397333
	PCB 169	0	0	0.00218	0.00223
	PCB 170	2.785	2.009	2.785	2.009
	PCB 180	7.34	6.193333	7.34	6.193333
	PCB 189	0.09615	0.067133	0.09615	0.067133
	Pentachloroanisol	0	0	1.95	1.766667
	Pentachlorophenol	0	0	369	386.6667
	Phenanthrene	0	0	9.2	9.633333
	Phenol	0	0	369	386.6667
	Pyrene	0	0	18.4	19.26667
	Retene	0	0	18.4	19.26667
	Selenium	0	580	500	580
	Silver	0	0	100	100
	Tetrachloroguaiacol	0	0	369	386.6667
	Thallium	0	0	50	50
	Toxaphene	0	0	58.5	53.33333
	trans-Nonachlor	8.15	6.533333	8.15	6.533333
	Vanadium	0	72.33333	10	72.33333
	Zinc	8825	17966.67	8825	17966.67
	PCB 077	0.03625	0.028533	0.03625	0.028533
	Aroclor 1016	0	0	19.5	17.66667
	Aroclor 1221	0	0	19.5	17.66667
	Aroclor 1232	0	0	19.5	17.66667
	Aroclor 1242	0	0	19.5	17.66667
	Aroclor 1248	0	0	19.5	17.66667
	Aroclor 1254	49.5	32.66667	49.5	32.66667
	Aroclor 1260	62.5	52.33333	62.5	52.33333
	DDD-o,p'	7.9	6.4	7.9	6.4
	DDE-o,p'	4.8	6.066667	5.8	6.066667
	DDT-o,p'	0	0	1.95	1.766667
	DDD-p,p'	55	51.33333	55	51.33333
	DDE-p,p'	425	410	425	410
	DDT-p,p'	4.65	1.873333	4.65	1.873333
	1,2,4-Trichlorobenzene	0	0	9.266667	9.266667
	1,2-Diphenylhydrazine	0	0	9.266667	9.266667
	2,3,4,6-Tetrachlorophenol	0	0	370.6667	371
	2,4,5-Trichlorophenol	0	0	370.6667	371
	2,4,6-Trichlorophenol	0	0	370.6667	371

Appendix E-2. Channel Catfish tissue concentration site data (ug/kg) at full detection limits and with the detection limits set at zero.

Station	Chemical	Detection limits and tissue sample types			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	2,4-Dichlorophenol	0	0	370.6667	371
	2,4-Dimethylphenol	0	0	926.6667	927.6667
	2,4-Dinitrotoluene	0	0	18.53333	18.53333
	2,6-Dinitrotoluene	0	0	37.06667	37.1
	2-Chloronaphthalene	0	0	18.53333	18.53333
	2-Chlorophenol	0	0	370.6667	371
	3,4,5-Trichloroguaiacol	0	0	926.6667	927.6667
	3,4,6-Trichloroguaiacol	0	0	370.6667	371
	3,4-Dichloroguaiacol	0	0	926.6667	927.6667
	4,5,6-Trichloroguaiacol	0	0	926.6667	927.6667
	4,5-Dichloroguaiacol	0	0	926.6667	927.6667
	4,6-Dichloroguaiacol	0	0	926.6667	927.6667
	4-Bromophenyl-Phenylether	0	0	9.266667	9.266667
	4-Chloro-3-methylphenol	0	0	370.6667	371
	4-Chloroguaiacol	0	0	926.6667	927.6667
	4-Chlorophenyl-Phenylether	0	0	9.266667	9.266667
	9H-Fluorene	0	0	9.266667	9.266667
	Acenaphthene	0	0	18.53333	18.53333
	Acenaphthylene	0	0	9.266667	9.266667
	Aldrin	0	0	1.933333	1.9
	Alpha-BHC	0	0	1.933333	1.9
	Alpha-Chlordene	0	0	1.933333	1.9
	Aluminum	477.3333	7023.333	810.6667	7023.333
	Anthracene	0	0	9.266667	9.266667
	Antimony	0	0	50	50
	Arsenic	45	123.3333	61.66667	123.3333
	Barium	832.3333	1523.333	832.3333	1523.333
	Benzene, 1,2-dichloro-	0	0	9.266667	9.266667
	Benzene, 1,3-dichloro-	0	0	9.266667	9.266667
	Benzene, 1,4-dichloro-	0	0	9.266667	9.266667
	Benzo(a)anthracene	0	0	9.266667	9.266667
	Benzo(a)pyrene	0	0	9.266667	9.266667
	Benzo(g,h,i)perylene	0	0	18.53333	18.53333
	Benzo[b]Fluoranthene	0	0	9.266667	9.266667
	Benzo[k]fluoranthene	0	0	9.266667	9.266667
	Beryllium	0	0	4	4
	Beta-BHC	0	0	1.933333	1.9
	bis(2-Chloroisopropyl)ether	0	0	18.53333	18.53333
	Cadmium	0	20.66667	4	20.66667
	Chromium	273.3333	273.3333	273.3333	273.3333
	Chrysene	0	0	9.266667	9.266667
	cis-Chlordane (alpha-Chlordane)	5.366667	4.566667	5.366667	4.566667
	cis-Nonachlor	0.866667	2.366667	2.133333	2.366667
	Cobalt	174.6667	183	174.6667	183
	Copper	326.6667	514.6667	326.6667	514.6667
	DDMU	50	36.33333	50	36.33333

Appendix E-2. Channel Catfish tissue concentration site data (ug/kg) at full detection limits and with the detection limits set at zero.

Station	Chemical	Detection limits and tissue sample types			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Delta-BHC	0	0	1.933333	1.9
	Dibenz[a,h]anthracene	0	0	18.53333	18.53333
	Dibenzofuran	0	0	9.266667	9.266667
	Endosulfan Sulfate	2.566667	1.933333	2.566667	1.933333
	Fluoranthene	0	0	18.53333	18.53333
	Gamma-Chlordane	0.823333	2.2	1.456667	2.2
	gamma-Chlordene	0	0	1.933333	1.9
	Heptachlor	0	0	1.933333	1.9
	Heptachlor Epoxide	0	0	1.933333	1.9
	Hexachlorobenzene	2.033333	5.066667	2.666667	5.066667
	Hexachlorobutadiene	0	0	9.266667	9.266667
	Hexachloroethane	0	0	9.266667	9.266667
	Indeno(1,2,3-cd)pyrene	0	0	18.53333	18.53333
	Lead	0	25.33333	10	25.33333
	Lindane	0	0	1.933333	1.9
	Manganese	273.6667	2540	273.6667	2540
	Mercury	269.6667	195	269.6667	195
	Mirex	0	0	1.933333	1.9
	Naphthalene	0	0	17.4	13.66667
	Naphthalene, 1-methyl-	0	0	9.266667	9.266667
	Naphthalene, 2-methyl-	0	0	9.266667	9.266667
	Nickel	44	116.3333	54	116.3333
	Nitrobenzene	0	0	9.266667	9.266667
	n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Oxychlordane	1.133333	1.7	1.133333	1.7
	Pentachloroanisol	0.696667	1.053333	1.33	1.053333
	Pentachlorophenol	0	0	370.6667	371
	Phenanthrene	0	0	9.466667	9.266667
	Phenol	0	0	370.6667	371
	Pyrene	0	0	18.53333	18.53333
	Retene	0	0	18.53333	18.53333
	Selenium	253.3333	426.6667	253.3333	426.6667
	Silver	0	0	100	100
	Tetrachloroguaiacol	0	0	370.6667	371
	Thallium	0	0	50	50
	Toxaphene	0	0	58	57.33333
	trans-Nonachlor	9.933333	12	9.933333	12
	Vanadium	7.666667	152	14.33333	152
	Zinc	9170	17733.33	9170	17733.33
	Aroclor 1016	0	0	19.33333	19
	Aroclor 1221	0	0	19.33333	19
	Aroclor 1232	0	0	19.33333	19
	Aroclor 1242	0	0	19.33333	19
	Aroclor 1248	0	0	19.33333	19
	Aroclor 1254	51.33333	44	51.33333	44
	Aroclor 1260	102.3333	101.6667	102.3333	101.6667

Appendix E-2. Channel Catfish tissue concentration site data (ug/kg) at full detection limits and with the detection limits set at zero.

Station	Chemical	Detection limits and tissue sample types			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	DDD-o,p'	24.33333	22	24.33333	22
	DDE-o,p'	9.3	6.266667	9.3	6.266667
	DDT-o,p'	8.766667	4.366667	8.766667	5
	DDD-p,p'	103.6667	81	103.6667	81
	DDE-p,p'	1006.667	730	1006.667	730
	DDT-p,p'	48.66667	40	48.66667	40

**Appendix E-3. Coho salmon basin averages at full detection limits
and at the detection limit set to zero.**

Chemical	Ave. values at full detection limits			Ave. values at zero detection limits		
	Eggs	Fillet+skin	Whole Body	Eggs	Fillet+skin	Whole Body
1,2,3,4,6,7,8-HpCDD	0.000143	9.67E-05	0.00004	0.000143	9.333E-05	0.00002
1,2,3,4,6,7,8-HpCDF	0.00007	0.00003	2.333E-05	6.33E-05	2.667E-05	0
1,2,3,4,7,8,9-HpCDF	3.33E-05	0.00001	2.333E-05	0.00003	0	0
1,2,3,4,7,8-HxCDD	0.00001	0.00001	1.667E-05	3.33E-06	0	0
1,2,3,4,7,8-HxCDF	2.67E-05	0.00001	1.667E-05	2.33E-05	0	0
1,2,3,6,7,8-HxCDD	0.00005	3.67E-05	1.667E-05	4.67E-05	3.333E-05	0
1,2,3,6,7,8-HxCDF	1.67E-05	0.00001	1.667E-05	0.00001	0	0
1,2,3,7,8,9-HxCDD	0.00001	1.67E-05	0.00002	0	0.00001	6.667E-06
1,2,3,7,8,9-HxCDF	2.33E-05	0.00001	1.667E-05	0.00002	0	0
1,2,3,7,8-PeCDD	0.00004	0.00004	0.00004	3.33E-05	3.667E-05	0
1,2,3,7,8-PeCDF	1.67E-05	0.00001	2.667E-05	0.00001	0	0
1,2,4-Trichlorobenzene	9.733333	9.6	9.2	0	0	0
1,2-Diphenylhydrazine	9.733333	9.6	9.2	0	0	0
2,3,4,6,7,8-HxCDF	0.00002	0.00001	1.667E-05	1.33E-05	0	0
2,3,4,6-Tetrachlorophenol	390.3333	384	368.66667	0	0	0
2,3,4,7,8-PeCDF	0.00007	0.00005	5.333E-05	6.67E-05	4.667E-05	4.667E-05
2,3,7,8-TCDD	3.67E-05	0.00002	3.333E-05	3.33E-05	1.333E-05	0
2,3,7,8-TCDF	0.000513	0.000457	0.0004433	0.000513	0.0004567	0.0004433
2,4,5-Trichlorophenol	390.3333	384	368.66667	0	0	0
2,4,6-Trichlorophenol	390.3333	384	368.66667	0	0	0
2,4-Dichlorophenol	390.3333	384	368.66667	0	0	0
2,4-Dimethylphenol	976	960	921.66667	0	0	0
2,4-Dinitrotoluene	19.46667	64.13333	147.66667	0	0	0
2,6-Dinitrotoluene	38.93333	38.4	36.866667	0	0	0
2-Chloronaphthalene	19.46667	19.2	18.433333	0	0	0
2-Chlorophenol	390.3333	384	368.66667	0	0	0
3,4,5-Trichloroguaiacol	976	960	921.66667	0	0	0
3,4,6-Trichloroguaiacol	390.3333	384	368.66667	0	0	0
3,4-Dichloroguaiacol	976	960	921.66667	0	0	0
4,5,6-Trichloroguaiacol	976	960	921.66667	0	0	0
4,5-Dichloroguaiacol	976	960	921.66667	0	0	0
4,6-Dichloroguaiacol	976	960	921.66667	0	0	0
4-Bromophenyl-Phenylether	9.733333	9.6	9.2	0	0	0
4-Chloro-3-methylphenol	390.3333	384	368.66667	0	0	0
4-Chloroguaiacol	976	960	921.66667	0	0	0
4-Chlorophenyl-Phenylether	9.733333	9.6	9.2	0	0	0
9H-Fluorene	9.733333	9.6	9.2	0	0	0
Acenaphthene	19.46667	19.2	18.433333	0	0	0
Acenaphthylene	9.733333	9.6	9.2	0	0	0
Aldrin	1.9	1.933333	1.9	0	0	0
Alpha-BHC	1.9	1.933333	1.9	0	0	0
Alpha-Chlordene	1.9	1.933333	1.9	0	0	0
Aluminum	1183.333	1000	1000	516.6667	0	0
Anthracene	9.733333	9.6	9.2	0	0	0
Antimony	50	50	50	0	0	0
Arsenic	330	538.6667	498.33333	330	538.66667	498.33333
Barium	200	223.3333	206.66667	0	90	73.333333

**Appendix E-3. Coho salmon basin averages at full detection limits
and at the detection limit set to zero.**

Chemical	Ave. values at full detection limits			Ave. values at zero detection limits		
	Eggs	Fillet+skin	Whole Body	Eggs	Fillet+skin	Whole Body
Benzene, 1,2-dichloro-	9.733333	9.6	9.2	0	0	0
Benzene, 1,3-dichloro-	9.733333	9.6	9.2	0	0	0
Benzene, 1,4-dichloro-	9.733333	9.6	9.2	0	0	0
Benzo(a)anthracene	9.733333	9.6	9.2	0	0	0
Benzo(a)pyrene	9.733333	9.6	9.2	0	0	0
Benzo(g,h,i)perylene	19.46667	19.2	18.433333	0	0	0
Benzo[b]Fluoranthene	9.733333	9.6	9.2	0	0	0
Benzo[k]fluoranthene	9.733333	9.6	9.2	0	0	0
Beryllium	4	4	4	0	0	0
Beta-BHC	1.9	1.933333	1.9	0	0	0
bis(2-Chloroisopropyl)ether	19.46667	19.2	18.433333	0	0	0
Cadmium	4	4	22.333333	0	0	22.333333
Chromium	100	143.3333	130	0	143.33333	130
Chrysene	9.733333	9.6	9.2	0	0	0
cis-Chlordane (alpha-Chlordane)	1.9	1.933333	1.9	0	0	0
cis-Nonachlor	1.9	1.933333	1.9	0	0	0
Cobalt	12.33333	123	124.66667	12.33333	123	124.66667
Copper	4456.667	1687.333	1346	4456.667	1687.3333	1346
DDMU	1.9	1.933333	1.9	0	0	0
Delta-BHC	1.9	1.933333	1.9	0	0	0
Dibenz[a,h]anthracene	19.46667	19.2	18.433333	0	0	0
Dibenzofuran	9.733333	9.6	9.2	0	0	0
Endosulfan Sulfate	1.9	1.9	#DIV/0!	0	0	#DIV/0!
Fluoranthene	19.46667	19.2	18.433333	0	0	0
Gamma-Chlordane	1.9	1.933333	1.9	0	0	0
Gamma-Chlordene	1.9	1.933333	1.9	0	0	0
Heptachlor	1.9	1.933333	1.9	0	0	0
Heptachlor Epoxide	1.9	1.933333	1.9	0	0	0
Hexachlorobenzene	1.9	1.933333	1.2	0	0	1.2
Hexachlorobutadiene	9.733333	9.6	9.2	0	0	0
Hexachloroethane	9.733333	9.6	9.2	0	0	0
Indeno(1,2,3-cd)pyrene	19.46667	19.2	18.433333	0	0	0
Lead	10	82.66667	14.666667	0	79.333333	14.666667
Lindane	1.9	1.933333	1.9	0	0	0
Manganese	704	194.3333	500	704	194.33333	500
Mercury	100	116.6667	104	0	116.66667	104
Mirex	1.9	1.933333	1.9	0	0	0
Naphthalene	22.9	22.23333	18.1	0	0	0
Naphthalene, 1-methyl-	9.733333	9.6	9.2	0	0	0
Naphthalene, 2-methyl-	9.733333	9.6	9.2	0	0	0
Nickel	84	59	1179.3333	84	49	1179.3333
Nitrobenzene	9.733333	9.6	9.2	0	0	0
n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
OCDD	0.00177	0.00037	0.0001433	0.00177	0.00037	0.00014
OCDF	0.000137	0.00002	0.00005	0.000133	0	0
Oxychlordane	1.9	1.933333	1.9	0	0	0
PCB 105	0.317	0.297333	0.307	0.317	0.2973333	0.307

**Appendix E-3. Coho salmon basin averages at full detection limits
and at the detection limit set to zero.**

Chemical	Ave. values at full detection limits			Ave. values at zero detection limits		
	Eggs	Fillet+skin	Whole Body	Eggs	Fillet+skin	Whole Body
PCB 114	0.029133	0.028233	0.0272	0.029133	0.0282333	0.0272
PCB 118	0.722	0.718667	0.7266667	0.722	0.7186667	0.7266667
PCB 123	0.012367	0.011773	0.0098733	0.012367	0.0117733	0.0098733
PCB 126	0.000953	0.00142	0.0032933	0	0	0.0032933
PCB 156	0.0891	0.108033	0.0969	0.0891	0.1080333	0.0969
PCB 157	0.020067	0.0224	0.0208	0.020067	0.0224	0.0208
PCB 167	0.0367	0.0468	0.0463333	0.0367	0.0468	0.0463333
PCB 169	0.001097	0.00103	0.001	0	0	0
PCB 170	0.163667	0.208667	0.1866667	0.163667	0.2086667	0.1866667
PCB 180	0.504667	0.688667	0.59	0.504667	0.6886667	0.59
PCB 189	0.005803	0.008597	0.0076067	0.005803	0.0085967	0.0076067
Pentachloroanisol	1.9	1.933333	1.9	0	0	0
Pentachlorophenol	390.3333	384	368.66667	0	0	0
Phenanthrene	9.733333	9.6	9.2	0	0	0
Phenol	390.3333	384	368.66667	0	0	0
Pyrene	19.46667	19.2	18.433333	0	0	0
Retene	19.46667	19.2	18.433333	0	0	0
Selenium	1223.333	293.3333	363.33333	1223.333	293.33333	363.33333
Silver	100	100	100	0	0	0
Tetrachloroguaiacol	390.3333	384	368.66667	0	0	0
Thallium	50	50	50	0	0	0
Toxaphene	56.66667	58	57.333333	0	0	0
trans-Nonachlor	1.9	1.933333	1.9	0	0	0
Vanadium	28	10.66667	37.666667	28	4	37.666667
Zinc	31366.67	7130	30333.333	31366.67	7130	30333.333
PCB 077	0.0104	0.00815	0.00993	0.0104	0.00815	0.00993
Aroclor 1016	19	19.33333	19	0	0	0
Aroclor 1221	19	19.33333	19	0	0	0
Aroclor 1232	19	19.33333	19	0	0	0
Aroclor 1242	19	19.33333	19	0	0	0
Aroclor 1248	19	19.33333	19	0	0	0
Aroclor 1254	15	15.66667	18.666667	15	15.666667	18.666667
Aroclor 1260	19	19.33333	19	0	0	0
DDD-o,p'	1.9	1.933333	1.9	0	0	0
DDE-o,p'	1.9	1.933333	1.9	0	0	0
DDT-o,p'	1.9	1.933333	1.9	0	0	0
DDD-p,p'	2.766667	2.733333	1.9	2.766667	2.7333333	1.3
DDE-p,p'	32	32.66667	35	32	32.666667	35
DDT-p,p'	1.9	2.6	3.3	0	1.3333333	2.6333333

Appendix E-5. Fall chinook tissue samples -site averages (ug/kg) at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
Sta. 8	1,2,3,4,6,7,8-HpCDD	0.00005	1.67E-05	0	0.00005	2.17E-05	3.33E-05
	1,2,3,4,6,7,8-HpCDF	0	0	0	0.00002	1.17E-05	2.67E-05
	1,2,3,4,7,8,9-HpCDF	0	0	0	0.00002	1.17E-05	2.67E-05
	1,2,3,4,7,8-HxCDD	0	0	0	0.00001	1.17E-05	3.67E-05
	1,2,3,4,7,8-HxCDF	0	0	0	0.00002	0.00002	0.00004
	1,2,3,6,7,8-HxCDD	0	2.17E-05	0	0.00001	2.83E-05	3.67E-05
	1,2,3,6,7,8-HxCDF	0	0	0	0.00002	0.00002	0.00004
	1,2,3,7,8,9-HxCDD	0	0	0	0.00001	1.17E-05	3.67E-05
	1,2,3,7,8,9-HxCDF	0	0	0	0.00002	0.00002	0.00004
	1,2,3,7,8-PeCDD	0	0	0	0.00004	2.67E-05	0.00005
	1,2,3,7,8-PeCDF	0	0	0	0.00003	2.33E-05	3.33E-05
	1,2,4-Trichlorobenzene	0	0	0	9.6	9.483333	9.566667
	1,2-Diphenylhydrazine	0	0	0	9.6	9.483333	9.566667
	2,3,4,6,7,8-HxCDF	0	0	0	0.00002	0.00002	0.00004
	2,3,4,6-Tetrachlorophenol	0	0	0	385	378.3333	382.3333
	2,3,4,7,8-PeCDF	0	1.67E-05	0	0.00003	3.67E-05	3.33E-05
	2,3,7,8-TCDD	0	6.67E-06	0	0.00004	1.83E-05	0.00003
	2,3,7,8-TCDF	0.00043	0.000742	0.000537	0.00043	0.000742	0.000537
	2,4,5-Trichlorophenol	0	0	0	385	378.3333	382.3333
	2,4,6-Trichlorophenol	0	0	0	385	378.3333	382.3333
	2,4-Dichlorophenol	0	0	0	385	378.3333	382.3333
	2,4-Dimethylphenol	0	0	0	963	945.8333	956
	2,4-Dinitrotoluene	0	0	0	19.2	18.96667	19.1
	2,6-Dinitrotoluene	0	0	0	38.4	37.93333	38.2
	2-Chloronaphthalene	0	0	0	19.2	18.96667	19.1
	2-Chlorophenol	0	0	0	385	378.3333	382.3333
	3,4,5-Trichloroguaiacol	0	0	0	963	945.8333	956
	3,4,6-Trichloroguaiacol	0	0	0	385	378.3333	382.3333
	3,4-Dichloroguaiacol	0	0	0	963	945.8333	956
	4,5,6-Trichloroguaiacol	0	0	0	963	945.8333	956
	4,5-Dichloroguaiacol	0	0	0	963	945.8333	956
	4,6-Dichloroguaiacol	0	0	0	963	945.8333	956
	4-Bromophenyl-Phenylether	0	0	0	9.6	9.483333	9.566667
	4-Chloro-3-methylphenol	0	0	0	385	378.3333	382.3333
	4-Chloroguaiacol	0	0	0	963	945.8333	956
	4-Chlorophenyl-Phenylether	0	0	0	9.6	9.483333	9.566667
	9H-Fluorene	0	0	0	9.6	9.483333	9.566667
	Acenaphthene	0	0	0	19.2	18.96667	19.1
	Acenaphthylene	0	0	0	9.6	9.483333	9.566667
	Aldrin	0	0	0	1.9	1.966667	1.933333
	Alpha-BHC	0	0	0	1.9	1.966667	1.933333
	Alpha-Chlordene	0	0	0	1.9	1.966667	1.933333
	Aluminum	0	316.6667	0	1000	1150	1000
	Anthracene	0	0	0	9.6	9.483333	9.566667
	Antimony	0	0	0	50	50	50
	Arsenic	240	996	857.3333	240	996	857.3333
	Barium	0	0	0	200	200	200

Appendix E-5. Fall chinook tissue samples -site averages (ug/kg) at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
	Benzene, 1,2-dichloro-	0	0	0	9.6	9.483333	9.566667
	Benzene, 1,3-dichloro-	0	0	0	9.6	9.483333	9.566667
	Benzene, 1,4-dichloro-	0	0	0	9.6	9.483333	9.566667
	Benzo(a)anthracene	0	0	0	9.6	9.483333	9.566667
	Benzo(a)pyrene	0	0	0	9.6	9.483333	9.566667
	Benzo(g,h,i)perylene	0	0	0	19.2	18.96667	19.1
	Benzo[b]Fluoranthene	0	0	0	9.6	9.483333	9.566667
	Benzo[k]fluoranthene	0	0	0	9.6	9.483333	9.566667
	Beryllium	0	0	0	4	4	4
	Beta-BHC	0	0	0	1.9	1.966667	1.933333
	bis(2-Chloroisopropyl)ether	0	0	0	19.2	18.96667	19.1
	Cadmium	0	0	5.966667	4	4	5.966667
	Chromium	0	0	0	100	100	100
	Chrysene	0	0	0	9.6	9.483333	9.566667
	cis-Chlordane (alpha-Chlordane)	1.7	0	1.033333	1.7	1.966667	1.7
	cis-Nonachlor	0	0	0.4	1.9	1.966667	1.7
	Cobalt	35	3.416667	125.3333	35	3.416667	125.3333
	Copper	5840	593.3333	5660	5840	593.3333	5660
	DDMU	0	0	0.466667	1.9	1.966667	1.766667
	Delta-BHC	0	0	0	1.9	1.966667	1.933333
	Dibenz[a,h]anthracene	0	0	0	19.2	18.96667	19.1
	Dibenzofuran	0	0	0	9.6	9.483333	9.566667
	Endosulfan Sulfate	0	0	0	1.9	1.966667	1.9
	Fluoranthene	0	0	0	19.2	18.96667	19.1
	Gamma-Chlordane	0	0	0	1.9	1.966667	1.933333
	gamma-Chlordene	0	0	0	1.9	1.966667	1.933333
	Heptachlor	0	0	0	1.9	1.966667	1.933333
	Heptachlor Epoxide	0	0	0	1.9	1.966667	1.9
	Hexachlorobenzene	4.3	2.216667	3.6	4.3	2.216667	3.6
	Hexachlorobutadiene	0	0	0	9.6	9.483333	9.566667
	Hexachloroethane	0	0	0	9.6	9.483333	9.566667
	Indeno(1,2,3-cd)pyrene	0	0	0	19.2	18.96667	19.1
	Lead	0	0	429.3333	10	10	429.3333
	Lindane	0	0	0	1.9	1.966667	1.933333
	Manganese	964	85.83333	344.3333	964	85.83333	344.3333
	Mercury	0	84.16667	66.33333	50	84.16667	99.66667
	Mirex	0	0	0	1.9	1.966667	1.933333
	Naphthalene	0	0	0	44.2	24.35	30.2
	Naphthalene, 1-methyl-	0	0	0	9.6	9.483333	9.766667
	Naphthalene, 2-methyl-	0	0	0	9.6	9.483333	10.83333
	Nickel	54	17.33333	134.6667	54	32.33333	134.6667
	Nitrobenzene	0	0	0	9.6	9.483333	10.66667
	n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	0.00028	5.67E-05	0.000183	0.00028	6.33E-05	0.00022
	OCDF	0	0	0	0.00005	4.67E-05	0.00008
	Oxychlordane	0	0	0	1.9	1.966667	1.933333
	PCB 105	0.108	0.215667	0.133667	0.108	0.215667	0.133667

Appendix E-5. Fall chinook tissue samples -site averages (ug/kg) at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
Sta. 14	PCB 114	0.00976	0.018117	0.013533	0.00976	0.018117	0.013533
	PCB 118	0.254	0.478667	0.317667	0.254	0.478667	0.317667
	PCB 123	0.00485	0.008503	0.006463	0.00485	0.008503	0.006463
	PCB 126	0	0.001577	0.00052	0.0005	0.001673	0.0011
	PCB 156	0.0123	0.040433	0.0233	0.0123	0.040433	0.0233
	PCB 157	0.00431	0.01172	0.006677	0.00431	0.01172	0.006677
	PCB 167	0.00993	0.023733	0.0148	0.00993	0.023733	0.0148
	PCB 169	0	0	0	0.001	0.001	0.001
	PCB 170	0.0294	0.093083	0.047033	0.0294	0.093083	0.047033
	PCB 180	0.0947	0.309	0.158333	0.0947	0.309	0.158333
	PCB 189	0	0.00386	0.00114	0.001	0.00386	0.001473
	Pentachloroanisol	0	0	0	1.9	1.966667	1.933333
	Pentachlorophenol	0	0	0	385	378.3333	382.3333
	Phenanthrene	0	0	0	9.6	9.483333	9.566667
	Phenol	0	0	0	385	378.3333	382.3333
	Pyrene	0	0	0	19.2	18.96667	19.1
	Retene	0	0	0	19.2	18.96667	19.1
	Selenium	2440	345	497	2440	345	497
	Silver	0	0	0	100	100	100
	Tetrachloroguaiacol	0	0	0	385	378.3333	382.3333
	Thallium	0	0	0	50	50	50
	Toxaphene	0	0	0	58	58.83333	58.33333
	trans-Nonachlor	2.9	3.933333	3.233333	2.9	3.933333	3.233333
	Vanadium	19	0	17.33333	19	10	17.33333
	Zinc	35600	6106.667	30000	35600	6106.667	30000
	PCB 077	0.00464	0.005877	0.00634	0.00464	0.005877	0.00634
	Aroclor 1016	0	0	0	19	19.66667	19.33333
	Aroclor 1221	0	0	0	19	19.66667	19.33333
	Aroclor 1232	0	0	0	19	19.66667	19.33333
	Aroclor 1242	0	0	0	19	19.66667	19.33333
	Aroclor 1248	0	0	0	19	19.66667	19.33333
	Aroclor 1254	12	17.33333	15.66667	12	17.33333	15.66667
	Aroclor 1260	0	0	0	19	19.66667	19.33333
	DDD-o,p'	0	0	0	1.9	1.966667	1.933333
	DDE-o,p'	0	0	0	1.9	1.966667	1.933333
	DDT-o,p'	0	0	0	1.9	1.966667	1.933333
	DDD-p,p'	3.7	2.916667	2.9	3.7	2.916667	2.9
	DDE-p,p'	6.6	11.23333	6.533333	6.6	11.23333	6.533333
	DDT-p,p'	0	0.666667	0	1.9	1.966667	1.933333
	1,2,3,4,6,7,8-HpCDD		4.67E-05	3.67E-05		4.67E-05	4.33E-05
	1,2,3,4,6,7,8-HpCDF		0	0		0.00002	1.33E-05
	1,2,3,4,7,8,9-HpCDF		0	0		0.00002	1.33E-05
	1,2,3,4,7,8-HxCDD		0	0		3.33E-05	0.00002
	1,2,3,4,7,8-HxCDF		0	0		2.67E-05	1.67E-05
	1,2,3,6,7,8-HxCDD		0	0		3.33E-05	0.00002
	1,2,3,6,7,8-HxCDF		0	0		2.67E-05	1.67E-05
	1,2,3,7,8,9-HxCDD		0	0		3.33E-05	0.00002

Appendix E-5. Fall chinook tissue samples -site averages (ug/kg) at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
	1,2,3,7,8,9-HxCDF		0	0		2.67E-05	1.67E-05
	1,2,3,7,8-PeCDD		0	0		0.00003	2.67E-05
	1,2,3,7,8-PeCDF		2.67E-05	0		3.67E-05	2.33E-05
	1,2,4-Trichlorobenzene		0	0		9.6	9.533333
	1,2-Diphenylhydrazine		0	0		9.6	9.533333
	2,3,4,6,7,8-HxCDF		0	0		2.67E-05	1.67E-05
	2,3,4,6-Tetrachlorophenol		0	0		383.3333	381.6667
	2,3,4,7,8-PeCDF		5.33E-05	9.33E-05		6.33E-05	0.000103
	2,3,7,8-TCDD		0	0		2.67E-05	2.33E-05
	2,3,7,8-TCDF		0.001053	0.000963		0.001053	0.000963
	2,4,5-Trichlorophenol		0	0		383.3333	381.6667
	2,4,6-Trichlorophenol		0	0		383.3333	381.6667
	2,4-Dichlorophenol		0	0		383.3333	381.6667
	2,4-Dimethylphenol		0	0		958.6667	953
	2,4-Dinitrotoluene		0	0		153.3333	19.06667
	2,6-Dinitrotoluene		0	0		38.33333	38.13333
	2-Chloronaphthalene		0	0		19.2	19.06667
	2-Chlorophenol		0	0		383.3333	381.6667
	3,4,5-Trichloroguaiacol		0	0		958.6667	953
	3,4,6-Trichloroguaiacol		0	0		383.3333	381.6667
	3,4-Dichloroguaiacol		0	0		958.6667	953
	4,5,6-Trichloroguaiacol		0	0		958.6667	953
	4,5-Dichloroguaiacol		0	0		958.6667	953
	4,6-Dichloroguaiacol		0	0		958.6667	953
	4-Bromophenyl-Phenylether		0	0		9.6	9.533333
	4-Chloro-3-methylphenol		0	0		383.3333	381.6667
	4-Chloroguaiacol		0	0		958.6667	953
	4-Chlorophenyl-Phenylether		0	0		9.6	9.533333
	9H-Fluorene		0	0		9.6	9.533333
	Acenaphthene		0	0		19.2	19.06667
	Acenaphthylene		0	0		9.6	9.533333
	Aldrin		0	0		2	1.966667
	Alpha-BHC		0	0		2	1.966667
	Alpha-Chlordene		0	0		2	1.966667
	Aluminum		366.6667	0		1033.333	1000
	Anthracene		0	0		9.6	9.533333
	Antimony		0	0		50	50
	Arsenic		762	929.6667		762	929.6667
	Barium		0	0		200	200
	Benzene, 1,2-dichloro-		0	0		9.6	9.533333
	Benzene, 1,3-dichloro-		0	0		9.6	9.533333
	Benzene, 1,4-dichloro-		0	0		9.6	9.533333
	Benzo(a)anthracene		0	0		9.6	9.533333
	Benzo(a)pyrene		0	0		9.6	9.533333
	Benzo(g,h,i)perylene		0	0		19.2	19.06667
	Benzo[b]Fluoranthene		0	0		9.6	9.533333
	Benzo[k]fluoranthene		0	0		9.6	9.533333

Appendix E-5. Fall chinook tissue samples -site averages (ug/kg) at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
	Beryllium		0	0		4	4
	Beta-BHC		0	0		2	1.966667
	bis(2-Chloroisopropyl)ether		0	0		19.2	19.06667
	Cadmium		0	7.333333		4	7.333333
	Chromium		0	96.66667		100	130
	Chrysene		0	0		9.6	9.533333
	cis-Chlordane (alpha-Chlordane)		0	1		2	1.666667
	cis-Nonachlor		0	0		2	1.966667
	Cobalt		3.366667	147.6667		3.366667	147.6667
	Copper		616	6093.333		616	6093.333
	DDMU		0	0		2	1.966667
	Delta-BHC		0	0		2	1.966667
	Dibenz[a,h]anthracene		0	0		19.2	19.06667
	Dibenzofuran		0	0		9.6	9.533333
	Endosulfan Sulfate		#DIV/0!	0		#DIV/0!	1.966667
	Fluoranthene		0	0		19.2	19.06667
	Gamma-Chlordane		0	0		2	1.966667
	gamma-Chlordene		0	0		2	1.966667
	Heptachlor		0	0		2	1.966667
	Heptachlor Epoxide		0	0		2	1.966667
	Hexachlorobenzene		2.233333	2.5		2.233333	2.5
	Hexachlorobutadiene		0	0		9.6	9.533333
	Hexachloroethane		0	0		9.6	9.533333
	Indeno(1,2,3-cd)pyrene		0	0		19.2	19.06667
	Lead		0	455.3333		10	455.3333
	Lindane		0	0		2	1.966667
	Manganese		75.66667	277.3333		75.66667	277.3333
	Mercury		111.3333	96.33333		111.3333	96.33333
	Mirex		0	0		2	1.966667
	Naphthalene		0	0		19.46667	19.96667
	Naphthalene, 1-methyl-		0	0		9.6	9.533333
	Naphthalene, 2-methyl-		0	0		9.6	9.533333
	Nickel		106.6667	144		126.6667	144
	Nitrobenzene		0	0		9.6	9.533333
	n-Nitrosodiphenylamine		#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
	OCDD		0.00005	0		6.33E-05	3.33E-05
	OCDF		0	0		3.33E-05	4.33E-05
	Oxychlordane		0	0		2	1.966667
	PCB 105		0.514	0.544333		0.514	0.544333
	PCB 114		0.036267	0.041567		0.036267	0.041567
	PCB 118		1.055333	1.092667		1.055333	1.092667
	PCB 123		0.013867	0.013667		0.013867	0.013667
	PCB 126		0.002273	0.00275		0.00244	0.00275
	PCB 156		0.063267	0.078867		0.063267	0.078867
	PCB 157		0.015033	0.018733		0.015033	0.018733
	PCB 167		0.0312	0.033367		0.0312	0.033367
	PCB 169		0	0		0.001	0.001

Appendix E-5. Fall chinook tissue samples -site averages (ug/kg) at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
Sta. 30	PCB 170		0.072267	0.0909		0.072267	0.0909
	PCB 180		0.226333	0.275667		0.226333	0.275667
	PCB 189		0.0027	0.002417		0.0027	0.00275
	Pentachloroanisol		0	0		2	1.966667
	Pentachlorophenol		0	0		383.3333	381.6667
	Phenanthrene		0	0		9.6	9.533333
	Phenol		0	0		383.3333	381.6667
	Pyrene		0	0		19.2	19.06667
	Retene		0	0		19.2	19.06667
	Selenium		296.6667	308		296.6667	474.6667
	Silver		0	0		100	100
	Tetrachloroguaiacol		0	0		383.3333	381.6667
	Thallium		0	0		50	50
	Toxaphene		0	0		59.33333	59.33333
	trans-Nonachlor		3.166667	3.1		3.166667	3.1
	Vanadium		0	23		10	23
	Zinc		6453.333	25900		6453.333	25900
	PCB 077		0.0442	0.041867		0.0442	0.041867
	Aroclor 1016		0	0		20	19.66667
	Aroclor 1221		0	0		20	19.66667
	Aroclor 1232		0	0		20	19.66667
	Aroclor 1242		0	0		20	19.66667
	Aroclor 1248		0	0		20	19.66667
	Aroclor 1254		28.66667	25.66667		28.66667	25.66667
	Aroclor 1260		0	0		20	19.66667
	DDD-o,p'		0	1.186667		2	1.186667
	DDE-o,p'		0	0		2	1.966667
	DDT-o,p'		0	0		2	1.966667
	DDD-p,p'		4.2	5.533333		4.2	5.533333
	DDE-p,p'		9.533333	10.23333		9.533333	10.23333
	DDT-p,p'		2	0		2.666667	1.966667
	1,2,3,4,6,7,8-HpCDD		3.33E-05	0.00008		3.67E-05	8.33E-05
	1,2,3,4,6,7,8-HpCDF		0	0		0.00001	0.00001
	1,2,3,4,7,8,9-HpCDF		0	0		0.00001	0.00001
	1,2,3,4,7,8-HxCDD		0	0		0.00001	1.33E-05
	1,2,3,4,7,8-HxCDF		0	0		1.33E-05	0.00001
	1,2,3,6,7,8-HxCDD		6.67E-06	0.00002		1.33E-05	0.00003
	1,2,3,6,7,8-HxCDF		0	0		1.33E-05	0.00001
	1,2,3,7,8,9-HxCDD		1.67E-05	0		0.00002	1.33E-05
	1,2,3,7,8,9-HxCDF		0	0		1.33E-05	0.00001
	1,2,3,7,8-PeCDD		0.00002	0		3.33E-05	0.00001
	1,2,3,7,8-PeCDF		0	0		0.00001	0.00002
	1,2,4-Trichlorobenzene		0	0		9.233333	9.1
	1,2-Diphenylhydrazine		0	0		9.233333	9.1
	2,3,4,6,7,8-HxCDF		0	0		1.33E-05	0.00001
	2,3,4,6-Tetrachlorophenol		0	0		368.6667	365
	2,3,4,7,8-PeCDF		6.33E-05	3.33E-05		6.67E-05	4.67E-05

Appendix E-5. Fall chinook tissue samples -site averages (ug/kg) at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
	2,3,7,8-TCDD		6.67E-06	1.33E-05		1.67E-05	2.33E-05
	2,3,7,8-TCDF		0.000433	0.000893		0.000443	0.000893
	2,4,5-Trichlorophenol		0	0		368.6667	365
	2,4,6-Trichlorophenol		0	0		368.6667	365
	2,4-Dichlorophenol		0	0		368.6667	365
	2,4-Dimethylphenol		0	0		922.3333	912.6667
	2,4-Dinitrotoluene		0	0		147.3333	146.3333
	2,6-Dinitrotoluene		0	0		36.86667	36.5
	2-Chloronaphthalene		0	0		18.43333	18.26667
	2-Chlorophenol		0	0		368.6667	365
	3,4,5-Trichloroguaiacol		0	0		922.3333	912.6667
	3,4,6-Trichloroguaiacol		0	0		368.6667	365
	3,4-Dichloroguaiacol		0	0		922.3333	912.6667
	4,5,6-Trichloroguaiacol		0	0		922.3333	912.6667
	4,5-Dichloroguaiacol		0	0		922.3333	912.6667
	4,6-Dichloroguaiacol		0	0		922.3333	912.6667
	4-Bromophenyl-Phenylether		0	0		9.233333	9.1
	4-Chloro-3-methylphenol		0	0		368.6667	365
	4-Chloroguaiacol		0	0		922.3333	912.6667
	4-Chlorophenyl-Phenylether		0	0		9.233333	9.1
	9H-Fluorene		0	0		9.233333	9.1
	Acenaphthene		0	0		18.43333	18.26667
	Acenaphthylene		0	0		9.233333	9.1
	Aldrin		0	0		1.933333	1.966667
	Alpha-BHC		0	0		1.933333	1.966667
	Alpha-Chlordene		0	0		1.933333	1.966667
	Aluminum		0	0		1000	1000
	Anthracene		0	0		9.233333	9.1
	Antimony		0	0		50	50
	Arsenic		563	710.3333		563	710.3333
	Barium		0	0		200	200
	Benzene, 1,2-dichloro-		0	0		9.233333	9.1
	Benzene, 1,3-dichloro-		0	0		9.233333	9.1
	Benzene, 1,4-dichloro-		0	0		9.233333	9.1
	Benzo(a)anthracene		0	0		9.233333	9.1
	Benzo(a)pyrene		0	0		9.233333	9.1
	Benzo(g,h,i)perylene		0	0		18.43333	18.26667
	Benzo[b]Fluoranthene		0	0		9.233333	9.1
	Benzo[k]fluoranthene		0	0		9.233333	9.1
	Beryllium		0	0		4	4
	Beta-BHC		0	0		1.933333	1.966667
	bis(2-Chloroisopropyl)ether		0	0		18.43333	18.26667
	Cadmium		0	4.966667		4	4.966667
	Chromium		0	103.3333		100	136.6667
	Chrysene		0	0		9.233333	9.1
	cis-Chlordane (alpha-Chlordane)		0	0.766667		1.933333	2.066667
	cis-Nonachlor		0	0.433333		1.933333	1.733333

Appendix E-5. Fall chinook tissue samples -site averages (ug/kg) at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
	Cobalt		56.33333	153.6667		56.33333	153.6667
	Copper		628.6667	1200		628.6667	1200
	DDMU		0	0.8		1.933333	2.1
	Delta-BHC		0	0		1.933333	1.966667
	Dibenz[a,h]anthracene		0	0		18.43333	18.26667
	Dibenzofuran		0	0		9.233333	9.1
	Endosulfan Sulfate		#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
	Fluoranthene		0	0		18.43333	18.26667
	Gamma-Chlordane		0	0		1.933333	1.966667
	gamma-Chlordene		0	0		1.933333	1.966667
	Heptachlor		0	0		1.933333	1.966667
	Heptachlor Epoxide		0	0		1.933333	1.966667
	Hexachlorobenzene		1.466667	3.333333		1.466667	3.333333
	Hexachlorobutadiene		0	0		9.233333	9.1
	Hexachloroethane		0	0		9.233333	9.1
	Indeno(1,2,3-cd)pyrene		0	0		18.43333	18.26667
	Lead		12.33333	12.66667		12.33333	12.66667
	Lindane		0	0		1.933333	1.966667
	Manganese		91.33333	324.6667		91.33333	324.6667
	Mercury		79.33333	65.66667		79.33333	82.33333
	Mirex		0	0		1.933333	1.966667
	Naphthalene		0	0		16.13333	21.13333
	Naphthalene, 1-methyl-		0	0		9.233333	9.1
	Naphthalene, 2-methyl-		0	0		9.233333	9.1
	Nickel		86	98		96	98
	Nitrobenzene		0	0		9.233333	9.1
	n-Nitrosodiphenylamine		#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
	OCDD		0.00017	0		0.000173	1.67E-05
	OCDF		0	0		2.67E-05	0.00003
	Oxychlordane		0	0		1.933333	1.966667
	PCB 105		0.151367	0.334333		0.151367	0.334333
	PCB 114		0.015093	0.0287		0.015093	0.0287
	PCB 118		0.345333	0.745		0.345333	0.745
	PCB 123		0.006017	0.008883		0.006017	0.008883
	PCB 126		0.00085	0.002333		0.001017	0.0025
	PCB 156		0.0289	0.084533		0.0289	0.084533
	PCB 157		0.008437	0.020443		0.008437	0.020443
	PCB 167		0.0173	0.038133		0.0173	0.038133
	PCB 169		0	0		0.001	0.00107
	PCB 170		0.0738	0.1644		0.0738	0.1644
	PCB 180		0.232667	0.526		0.232667	0.526
	PCB 189		0.002267	0.00643		0.0026	0.00643
	Pentachloroanisol		0	0		1.933333	1.966667
	Pentachlorophenol		0	0		368.6667	365
	Phenanthrene		0	0		9.233333	9.1
	Phenol		0	0		368.6667	365
	Pyrene		0	0		18.43333	18.26667

Appendix E-5. Fall chinook tissue samples -site averages (ug/kg) at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
Sta. 48	Retene		0	0		18.43333	18.26667
	Selenium		280	473		280	473
	Silver		0	0		100	100
	Tetrachloroguaiacol		0	0		368.6667	365
	Thallium		0	0		50	50
	Toxaphene		0	0		57.66667	58.66667
	trans-Nonachlor		1.8	4.333333		2.433333	4.333333
	Vanadium		3.666667	32.66667		10.33333	32.66667
	Zinc		6863.333	28333.33		6863.333	28333.33
	PCB 077		0.005773	0.011483		0.005773	0.011483
	Aroclor 1016		0	0		19.33333	19.66667
	Aroclor 1221		0	0		19.33333	19.66667
	Aroclor 1232		0	0		19.33333	19.66667
	Aroclor 1242		0	0		19.33333	19.66667
	Aroclor 1248		0	0		19.33333	19.66667
	Aroclor 1254		12.2	26		12.2	26
	Aroclor 1260		0	0		19.33333	19.66667
	DDD-o,p'		0	0.4		1.933333	1.7
	DDE-o,p'		0	0		1.933333	1.966667
	DDT-o,p'		0	0		1.933333	1.966667
	DDD-p,p'		2.733333	2.166667		2.733333	2.166667
	DDE-p,p'		8.233333	25.8		8.233333	25.8
	DDT-p,p'		1.866667	2.233333		2.5	2.9
	1,2,3,4,6,7,8-HpCDD		0.00006	7.67E-05		0.000085	8.67E-05
	1,2,3,4,6,7,8-HpCDF		0	0.00004		3.33E-05	5.67E-05
	1,2,3,4,7,8,9-HpCDF		0	0		3.33E-05	2.33E-05
	1,2,3,4,7,8-HxCDD		0	0		4.83E-05	2.67E-05
	1,2,3,4,7,8-HxCDF		0	0		4.67E-05	2.33E-05
	1,2,3,6,7,8-HxCDD		0	4.33E-05		4.83E-05	0.00005
	1,2,3,6,7,8-HxCDF		0	0		4.67E-05	2.33E-05
	1,2,3,7,8,9-HxCDD		0	0		4.83E-05	2.67E-05
	1,2,3,7,8,9-HxCDF		0	0		4.67E-05	2.33E-05
	1,2,3,7,8-PeCDD		3.67E-05	5.67E-05		7.67E-05	7.33E-05
	1,2,3,7,8-PeCDF		0	0		3.67E-05	3.33E-05
	1,2,4-Trichlorobenzene		0	0		9.433333	9.233333
	1,2-Diphenylhydrazine		0	0		9.433333	9.233333
	2,3,4,6,7,8-HxCDF		0	0		4.67E-05	2.33E-05
	2,3,4,6-Tetrachlorophenol		0	0		378.1667	367.6667
	2,3,4,7,8-PeCDF		0	0		3.67E-05	3.33E-05
	2,3,7,8-TCDD		0	0		0.00004	0.00004
	2,3,7,8-TCDF		0.000603	0.00088		0.000603	0.00088
	2,4,5-Trichlorophenol		0	0		378.1667	367.6667
	2,4,6-Trichlorophenol		0	0		378.1667	367.6667
	2,4-Dichlorophenol		0	0		378.1667	367.6667
	2,4-Dimethylphenol		0	0		944.6667	920
	2,4-Dinitrotoluene		0	0		151.3333	147.3333
	2,6-Dinitrotoluene		0	0		37.81667	36.76667

Appendix E-5. Fall chinook tissue samples -site averages (ug/kg) at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
	2-Chloronaphthalene		0	0		18.9	18.4
	2-Chlorophenol		0	0		378.1667	367.6667
	3,4,5-Trichloroguaiacol		0	0		944.6667	920
	3,4,6-Trichloroguaiacol		0	0		378.1667	367.6667
	3,4-Dichloroguaiacol		0	0		944.6667	920
	4,5,6-Trichloroguaiacol		0	0		944.6667	920
	4,5-Dichloroguaiacol		0	0		944.6667	920
	4,6-Dichloroguaiacol		0	0		944.6667	920
	4-Bromophenyl-Phenylether		0	0		9.433333	9.233333
	4-Chloro-3-methylphenol		0	0		378.1667	367.6667
	4-Chloroguaiacol		0	0		944.6667	920
	4-Chlorophenyl-Phenylether		0	0		9.433333	9.233333
	9H-Fluorene		0	0		9.433333	9.233333
	Acenaphthene		0	0		18.9	18.4
	Acenaphthylene		0	0		9.433333	9.233333
	Aldrin		0	0		1.983333	1.9
	Alpha-BHC		0	0		1.983333	1.9
	Alpha-Chlordene		0	0		1.983333	1.9
	Aluminum		0	210		1000	876.6667
	Anthracene		0	0		9.433333	9.233333
	Antimony		0	0		50	50
	Arsenic		813.5	822.3333		813.5	822.3333
	Barium		226.6667	83.33333		293.3333	216.6667
	Benzene, 1,2-dichloro-		0	0		9.433333	9.233333
	Benzene, 1,3-dichloro-		0	0		9.433333	9.233333
	Benzene, 1,4-dichloro-		0	0		9.433333	9.233333
	Benzo(a)anthracene		0	0		9.433333	9.233333
	Benzo(a)pyrene		0	0		9.433333	9.233333
	Benzo(g,h,i)perylene		0	0		18.9	18.4
	Benzo[b]Fluoranthene		0	0		9.433333	9.233333
	Benzo[k]fluoranthene		0	0		9.433333	9.233333
	Beryllium		0	0		4	4
	Beta-BHC		0	0		1.983333	1.9
	bis(2-Chloroisopropyl)ether		0	0		18.9	18.4
	Cadmium		0	6.033333		4	6.033333
	Chromium		140	83.33333		173.3333	116.6667
	Chrysene		0	0		9.433333	9.233333
	cis-Chlordane (alpha-Chlordane)		0	0		1.983333	1.9
	cis-Nonachlor		0	0		1.983333	1.9
	Cobalt		166.8333	132.6667		166.8333	132.6667
	Copper		730.3333	1940		730.3333	1940
	DDMU		0	0		1.983333	1.9
	Delta-BHC		0	0		1.983333	1.9
	Dibenz[a,h]anthracene		0	0		18.9	18.4
	Dibenzofuran		0	0		9.433333	9.233333
	Endosulfan Sulfate		#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
	Fluoranthene		0	0		18.9	18.4

Appendix E-5. Fall chinook tissue samples -site averages (ug/kg) at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
	Gamma-Chlordane		0	0		1.983333	1.9
	gamma-Chlordene		0	0		1.983333	1.9
	Heptachlor		0	0		1.983333	1.9
	Heptachlor Epoxide		0	0		1.983333	1.9
	Hexachlorobenzene		1.816667	2.766667		1.816667	2.766667
	Hexachlorobutadiene		0	0		9.433333	9.233333
	Hexachloroethane		0	0		9.433333	9.233333
	Indeno(1,2,3-cd)pyrene		0	0		18.9	18.4
	Lead		3.666667	83.66667		10.33333	83.66667
	Lindane		0	0		1.983333	1.9
	Manganese		101.6667	311.6667		101.6667	311.6667
	Mercury		85.16667	83.33333		85.16667	100
	Mirex		0	0		1.983333	1.9
	Naphthalene		0	0		18.35	20.2
	Naphthalene, 1-methyl-		0	0		9.433333	9.233333
	Naphthalene, 2-methyl-		0	0		9.433333	9.233333
	Nickel		115.5	139.3333		115.5	139.3333
	Nitrobenzene		0	0		9.433333	9.233333
	n-Nitrosodiphenylamine		#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
	OCDD		0.000185	0.000297		0.00024	0.00031
	OCDF		0	0		0.000112	7.33E-05
	Oxychlordane		0	0		1.983333	1.9
	PCB 105		0.2015	0.251		0.2015	0.251
	PCB 114		0.018633	0.022467		0.018633	0.022467
	PCB 118		0.455	0.556		0.455	0.556
	PCB 123		0.00656	0.008963		0.00656	0.008963
	PCB 126		0.001813	0.001617		0.001813	0.001837
	PCB 156		0.046033	0.054133		0.046033	0.054133
	PCB 157		0.011433	0.015133		0.011433	0.015133
	PCB 167		0.02495	0.028267		0.02495	0.028267
	PCB 169		0	0		0.001	0.001
	PCB 170		0.107167	0.116633		0.107167	0.116633
	PCB 180		0.347833	0.369		0.347833	0.369
	PCB 189		0.00414	0.00341		0.00414	0.003743
	Pentachloroanisol		0	0		1.983333	1.9
	Pentachlorophenol		0	0		378.1667	367.6667
	Phenanthrene		0	0		9.433333	9.866667
	Phenol		0	0		402.1667	367.6667
	Pyrene		0	0		18.9	18.4
	Retene		0	0		18.9	18.4
	Selenium		358.3333	478.6667		358.3333	478.6667
	Silver		0	0		100	100
	Tetrachloroguaiacol		0	0		378.1667	367.6667
	Thallium		0	0		50	50
	Toxaphene		0	0		59.16667	57
	trans-Nonachlor		2.433333	3.7		2.433333	3.7
	Vanadium		2	24.66667		10.33333	24.66667

Appendix E-5. Fall chinook tissue samples -site averages (ug/kg) at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
Sta. 54	Zinc		7980	23233.33		7980	23233.33
	PCB 077		0.00781	0.009377		0.00781	0.009377
	Aroclor 1016		0	0		19.83333	19
	Aroclor 1221		0	0		19.83333	19
	Aroclor 1232		0	0		19.83333	19
	Aroclor 1242		0	0		19.83333	19
	Aroclor 1248		0	0		19.83333	19
	Aroclor 1254		14.83333	18.66667		14.83333	18.66667
	Aroclor 1260		0	0		19.83333	19
	DDD-o,p'		0	0		1.983333	1.9
	DDE-o,p'		0	0		1.983333	1.9
	DDT-o,p'		0	0		1.983333	1.9
	DDD-p,p'		3.866667	6.766667		4.533333	6.766667
	DDE-p,p'		23.83333	26.33333		23.83333	26.33333
	DDT-p,p'		5.15	6.966667		5.15	6.966667
	1,2,3,4,6,7,8-HpCDD		1.67E-05	0		0.00003	0.00004
	1,2,3,4,6,7,8-HpCDF		0	0		1.67E-05	1.67E-05
	1,2,3,4,7,8,9-HpCDF		0	0		1.67E-05	1.67E-05
	1,2,3,4,7,8-HxCDD		0	0		1.67E-05	1.67E-05
	1,2,3,4,7,8-HxCDF		0	0		0.00002	0.00002
	1,2,3,6,7,8-HxCDD		0	6.67E-06		1.67E-05	1.67E-05
	1,2,3,6,7,8-HxCDF		0	0		0.00002	0.00002
	1,2,3,7,8,9-HxCDD		0	0		1.67E-05	1.67E-05
	1,2,3,7,8,9-HxCDF		0	0		0.00002	0.00002
	1,2,3,7,8-PeCDD		0	0		0.00004	3.67E-05
	1,2,3,7,8-PeCDF		0	1.33E-05		2.33E-05	2.67E-05
	1,2,4-Trichlorobenzene		0	0		9.6	9.666667
	1,2-Diphenylhydrazine		0	0		9.6	9.666667
	2,3,4,6,7,8-HxCDF		0	0		0.00002	0.00002
	2,3,4,6-Tetrachlorophenol		0	0		384.3333	387.3333
	2,3,4,7,8-PeCDF		1.67E-05	4.67E-05		3.33E-05	5.67E-05
	2,3,7,8-TCDD		0	0		0.00003	2.33E-05
	2,3,7,8-TCDF		0.000567	0.000507		0.000567	0.000507
	2,4,5-Trichlorophenol		0	0		384.3333	387.3333
	2,4,6-Trichlorophenol		0	0		384.3333	387.3333
	2,4-Dichlorophenol		0	0		384.3333	387.3333
	2,4-Dimethylphenol		0	0		961	968.3333
	2,4-Dinitrotoluene		0	0		19.23333	19.33333
	2,6-Dinitrotoluene		0	0		38.43333	38.73333
	2-Chloronaphthalene		0	0		19.23333	19.33333
	2-Chlorophenol		0	0		384.3333	387.3333
	3,4,5-Trichloroguaiacol		0	0		961	968.3333
	3,4,6-Trichloroguaiacol		0	0		384.3333	387.3333
	3,4-Dichloroguaiacol		0	0		961	968.3333
	4,5,6-Trichloroguaiacol		0	0		961	968.3333
	4,5-Dichloroguaiacol		0	0		961	968.3333
	4,6-Dichloroguaiacol		0	0		961	968.3333

Appendix E-5. Fall chinook tissue samples -site averages (ug/kg) at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
	4-Bromophenyl-Phenylether		0	0		9.6	9.666667
	4-Chloro-3-methylphenol		0	0		384.3333	387.3333
	4-Chloroguaiacol		0	0		961	968.3333
	4-Chlorophenyl-Phenylether		0	0		9.6	9.666667
	9H-Fluorene		0	0		9.6	9.666667
	Acenaphthene		0	0		19.23333	19.33333
	Acenaphthylene		0	0		9.6	9.666667
	Aldrin		0	0		1.966667	2
	Alpha-BHC		0	0		1.966667	2
	Alpha-Chlordene		0	0		1.966667	2
	Aluminum		400	0		1066.667	1000
	Anthracene		0	0		9.6	9.666667
	Antimony		0	0		50	50
	Arsenic		916.6667	956.3333		916.6667	956.3333
	Barium		0	0		200	200
	Benzene, 1,2-dichloro-		0	0		9.6	9.666667
	Benzene, 1,3-dichloro-		0	0		9.6	9.666667
	Benzene, 1,4-dichloro-		0	0		9.6	9.666667
	Benzo(a)anthracene		0	0		9.6	9.666667
	Benzo(a)pyrene		0	0		9.6	9.666667
	Benzo(g,h,i)perylene		0	0		19.23333	19.33333
	Benzo[b]Fluoranthene		0	0		9.6	9.666667
	Benzo[k]fluoranthene		0	0		9.6	9.666667
	Beryllium		0	0		4	4
	Beta-BHC		0	0		1.966667	2
	bis(2-Chloroisopropyl)ether		0	0		19.23333	19.33333
	Cadmium		0	6.066667		4	6.066667
	Chromium		0	136.6667		100	136.6667
	Chrysene		0	0		9.6	9.666667
	cis-Chlordane (alpha-Chlordane)		0.966667	0.966667		1.633333	1.633333
	cis-Nonachlor		0.4	0		1.733333	2
	Cobalt		3.4	121.3333		3.4	121.3333
	Copper		645.3333	2283.333		645.3333	2283.333
	DDMU		0.866667	0		1.533333	2
	Delta-BHC		0	0		1.966667	2
	Dibenz[a,h]anthracene		0	0		19.23333	19.33333
	Dibenzofuran		0	0		9.6	9.666667
	Endosulfan Sulfate		#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
	Fluoranthene		0	0		19.23333	19.33333
	Gamma-Chlordane		0	0		1.966667	2
	gamma-Chlordene		0	0		1.966667	2
	Heptachlor		0	0		1.966667	2
	Heptachlor Epoxide		#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
	Hexachlorobenzene		2.633333	3		2.633333	3
	Hexachlorobutadiene		0	0		9.6	9.666667
	Hexachloroethane		0	0		9.6	9.666667
	Indeno(1,2,3-cd)pyrene		0	0		19.23333	19.33333

Appendix E-5. Fall chinook tissue samples -site averages (ug/kg) at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
	Lead		0	115.3333		10	115.3333
	Lindane		0	0		1.966667	2
	Manganese		82.33333	338.3333		82.33333	338.3333
	Mercury		49.66667	22		66.33333	55.33333
	Mirex		0	0		1.966667	2
	Naphthalene		0	0		32.2	32.9
	Naphthalene, 1-methyl-		0	0		9.866667	9.666667
	Naphthalene, 2-methyl-		0	0		14.33333	9.666667
	Nickel		17	143.3333		37	143.3333
	Nitrobenzene		0	0		9.6	9.666667
	n-Nitrosodiphenylamine		#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
	OCDD		3.67E-05	0		5.33E-05	0.00004
	OCDF		4.33E-05	0		6.67E-05	0.00007
	Oxychlordane		0	0		1.966667	2
	PCB 105		0.142	0.140333		0.142	0.140333
	PCB 114		0.012833	0.013833		0.012833	0.013833
	PCB 118		0.339667	0.331		0.339667	0.331
	PCB 123		0.006037	0.00623		0.006037	0.00623
	PCB 126		0	0.000167		0.000543	0.000537
	PCB 156		0.023267	0.03		0.023267	0.03
	PCB 157		0.005497	0.007997		0.005497	0.007997
	PCB 167		0.0157	0.016167		0.0157	0.016167
	PCB 169		0	0		0.001	0.001
	PCB 170		0.053167	0.055033		0.053167	0.055033
	PCB 180		0.175667	0.18		0.175667	0.18
	PCB 189		0.00137	0.001607		0.001703	0.002197
	Pentachloroanisol		0	0		1.966667	2
	Pentachlorophenol		0	0		384.3333	387.3333
	Phenanthrene		0	0		9.6	9.666667
	Phenol		0	0		384.3333	387.3333
	Pyrene		0	0		19.23333	19.33333
	Retene		0	0		19.23333	19.33333
	Selenium		380	500.6667		380	500.6667
	Silver		0	0		100	100
	Tetrachloroguaiacol		0	0		384.3333	387.3333
	Thallium		0	0		50	50
	Toxaphene		0	0		59.33333	59.66667
	trans-Nonachlor		3.033333	2.866667		3.033333	2.866667
	Vanadium		0	21.33333		10	21.33333
	Zinc		6066.667	27200		6066.667	27200
	PCB 077		0.004923	0.005803		0.004923	0.005803
	Aroclor 1016		0	0		19.66667	20
	Aroclor 1221		0	0		19.66667	20
	Aroclor 1232		0	0		19.66667	20
	Aroclor 1242		0	0		19.66667	20
	Aroclor 1248		0	0		19.66667	20
	Aroclor 1254		14	14.66667		14	14.66667

Appendix E-5. Fall chinook tissue samples -site averages (ug/kg) at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
	Aroclor 1260			0	0	19.66667	20
	DDD-o,p'			0	0	1.966667	2
	DDE-o,p'			0	0	1.966667	2
	DDT-o,p'			0	0	1.966667	2
	DDD-p,p'		2.233333	2.5		2.233333	2.5
	DDE-p,p'		6.566667	6.2		6.566667	6.2
	DDT-p,p'		0.9	1.4		2.233333	2.066667

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
Sta. 8	1,2,3,4,6,7,8-HpCDD	0	2		0.000205		0.000205
	1,2,3,4,6,7,8-HpCDF	0	1		0.00003		0.00004
	1,2,3,4,7,8,9-HpCDF	0	0		0		0.000015
	1,2,3,4,7,8-HxCDD	0	1		0.000015		0.000025
	1,2,3,4,7,8-HxCDF	0	0		0		0.000015
	1,2,3,6,7,8-HxCDD	0	0		0		0.00002
	1,2,3,6,7,8-HxCDF	0	0		0		0.000015
	1,2,3,7,8,9-HxCDD	0	1		0.000015		0.000025
	1,2,3,7,8,9-HxCDF	0	0		0		0.000015
	1,2,3,7,8-PeCDD	0	2		0.00007		0.00007
	1,2,3,7,8-PeCDF	0	2		0.00004		0.00004
	1,2,4-Trichlorobenzene	0	0		0		9.2
	1,2-Diphenylhydrazine	0	0		0		9.2
	2,3,4,6,7,8-HxCDF	0	1		0.000005		0.000015
	2,3,4,6-Tetrachlorophenol	0	0		0		369.5
	2,3,4,7,8-PeCDF	0	2		0.00009		0.00009
	2,3,7,8-TCDD	0	2		0.00019		0.00019
	2,3,7,8-TCDF	0	2		0.00321		0.00321
	2,4,5-Trichlorophenol	0	0		0		369.5
	2,4,6-Trichlorophenol	0	0		0		369.5
	2,4-Dichlorophenol	0	0		0		369.5
	2,4-Dimethylphenol	0	0		0		924
	2,4-Dinitrotoluene	0	0		0		18.4
	2,6-Dinitrotoluene	0	0		0		36.8
	2-Chloronaphthalene	0	0		0		18.4
	2-Chlorophenol	0	0		0		369.5
	3,4,5-Trichloroguaiacol	0	0		0		924
	3,4,6-Trichloroguaiacol	0	0		0		369.5
	3,4-Dichloroguaiacol	0	0		0		924
	4,5,6-Trichloroguaiacol	0	0		0		924
	4,5-Dichloroguaiacol	0	0		0		924
	4,6-Dichloroguaiacol	0	0		0		924
	4-Bromophenyl-Phenylether	0	0		0		9.2
	4-Chloro-3-methylphenol	0	0		0		369.5
	4-Chloroguaiacol	0	0		0		924
	4-Chlorophenyl-Phenylether	0	0		0		9.2
	9H-Fluorene	0	0		0		9.2
	Acenaphthene	0	0		0		18.4
	Acenaphthylene	0	0		0		9.2
	Aldrin	0	0		0		1.9
	Alpha-BHC	0	0		0		1.9
	Alpha-Chlordene	0	0		0		1.9
	Aluminum	0	2		165500		165500
	Anthracene	0	0		0		9.2
	Antimony	0	0		0		50.5
	Arsenic	0	2		310		310

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Barium	0	2		3145		3145
	Benzene, 1,2-dichloro-	0	0		0		9.2
	Benzene, 1,3-dichloro-	0	0		0		9.2
	Benzene, 1,4-dichloro-	0	0		0		9.2
	Benzo(a)anthracene	0	0		0		9.2
	Benzo(a)pyrene	0	0		0		9.2
	Benzo(g,h,i)perylene	0	0		0		18.4
	Benzo[b]Fluoranthene	0	0		0		9.2
	Benzo[k]fluoranthene	0	0		0		9.2
	Beryllium	0	2		8.55		8.55
	Beta-BHC	0	0		0		1.9
	bis(2-Chloroisopropyl)ether	0	0		0		18.4
	Cadmium	0	2		97.5		97.5
	Chromium	0	2		565		565
	Chrysene	0	0		0		9.2
	cis-Chlordane (alpha-Chlordane)	0	2		1.015		1.015
	cis-Nonachlor	0	2		1.9		1.9
	Cobalt	0	2		254		254
	Copper	0	2		953.5		953.5
	DDMU	0	2		5.35		5.35
	Delta-BHC	0	0		0		1.9
	Dibenz[a,h]anthracene	0	0		0		18.4
	Dibenzofuran	0	0		0		9.2
	Endosulfan Sulfate	0	0		0		1.9
	Fluoranthene	0	0		0		18.4
	Gamma-Chlordane	0	2		1.5		1.5
	Gamma-Chlordene	0	0		0		1.9
	Heptachlor	0	0		0		1.9
	Heptachlor Epoxide	0	0		0		1.9
	Hexachlorobenzene	0	2		2.7		2.7
	Hexachlorobutadiene	0	0		0		9.2
	Hexachloroethane	0	0		0		9.2
	Indeno(1,2,3-cd)pyrene	0	0		0		18.4
	Lead	0	2		198.5		198.5
	Lindane	0	0		0		1.9
	Manganese	0	2		10515		10515
	Mercury	0	1		102.5		152.5
	Mirex	0	2		1.08		1.08
	Naphthalene	0	0		0		20.85
	Naphthalene, 1-methyl-	0	0		0		9.2
	Naphthalene, 2-methyl-	0	0		0		9.2
	Nickel	0	2		481		481
	Nitrobenzene	0	0		0		9.2
	n-Nitrosodiphenylamine	0	0		#DIV/0!		#DIV/0!
	OCDD	0	2		0.00093		0.00093
	OCDF	0	1		0.000055		0.000065

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Oxychlorthane	0	0	0	0	1.9	1.9
	PCB 105	0	2	1.21	1.21		
	PCB 114	0	2	0.09575	0.09575		
	PCB 118	0	2	2.38	2.38		
	PCB 123	0	2	0.04825	0.04825		
	PCB 126	0	0	0	0.00131		
	PCB 156	0	2	0.453	0.453		
	PCB 157	0	2	0.0895	0.0895		
	PCB 167	0	2	0.193	0.193		
	PCB 169	0	0	0	0.001325		
	PCB 170	0	2	0.918	0.918		
	PCB 180	0	2	2.67	2.67		
	PCB 189	0	2	0.03035	0.03035		
	Pentachloroanisol	0	0	0	1.9		
	Pentachlorophenol	0	0	0	369.5		
	Phenanthrene	0	0	0	9.2		
	Phenol	0	0	0	369.5		
	Pyrene	0	0	0	18.4		
	Retene	0	0	0	18.4		
	Selenium	0	0	0	500		
	Silver	0	0	0	100		
	Tetrachloroguaiacol	0	0	0	369.5		
	Thallium	0	0	0	50.5		
	Toxaphene	0	0	0	56.5		
	trans-Nonachlor	0	2	2.85	2.85		
	Vanadium	0	2	548.5	548.5		
	Zinc	0	2	16450	16450		
	PCB 077	0	2	0.05075	0.05075		
	Aroclor 1016	0	0	0	19		
	Aroclor 1221	0	0	0	19		
	Aroclor 1232	0	0	0	19		
	Aroclor 1242	0	0	0	19		
	Aroclor 1248	0	0	0	19		
	Aroclor 1254	0	2	28.5	28.5		
	Aroclor 1260	0	2	21.5	21.5		
	DDD-o,p'	0	2	8.4	8.4		
	DDE-o,p'	0	2	3.15	3.15		
	DDT-o,p'	0	0	0	1.9		
	DDD-p,p'	0	2	40	40		
	DDE-p,p'	0	2	250	250		
	DDT-p,p'	0	2	5.75	5.75		
Sta. 9	1,2,3,4,6,7,8-HpCDD	2	3	5.7E-05	0.00012	0.00006	0.00012
	1,2,3,4,6,7,8-HpCDF	1	2	0.00002	0.00002	0.00003	2.33E-05
	1,2,3,4,7,8,9-HpCDF	0	0	0	0	1.7E-05	1.33E-05
	1,2,3,4,7,8-HxCDD	0	1	0	3.33E-06	1.7E-05	1.33E-05
	1,2,3,4,7,8-HxCDF	1	1	0.00001	6.67E-06	1.7E-05	1.67E-05

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	1,2,3,6,7,8-HxCDD	1	2	0.00001	2.67E-05	2.3E-05	0.00003
	1,2,3,6,7,8-HxCDF	0	1	0	3.33E-06	0.00001	1.33E-05
	1,2,3,7,8,9-HxCDD	2	0	2.7E-05	0	3.3E-05	1.33E-05
	1,2,3,7,8,9-HxCDF	1	0	6.7E-06	0	1.3E-05	1.33E-05
	1,2,3,7,8-PeCDD	2	3	0.00002	5.67E-05	2.3E-05	5.67E-05
	1,2,3,7,8-PeCDF	0	0	0	0	1.7E-05	0.00002
	1,2,4-Trichlorobenzene	0	0	0	0	7.93333	9.433333
	1,2-Diphenylhydrazine	0	0	0	0	7.93333	9.433333
	2,3,4,6,7,8-HxCDF	0	0	0	0	0.00001	1.33E-05
	2,3,4,6-Tetrachlorophenol	0	0	0	0	317	377
	2,3,4,7,8-PeCDF	2	1	3.3E-05	0.00004	0.00004	5.33E-05
	2,3,7,8-TCDD	1	2	1.3E-05	4.67E-05	2.3E-05	0.00005
	2,3,7,8-TCDF	3	3	0.00121	0.00203	0.00121	0.00203
	2,4,5-Trichlorophenol	0	0	0	0	317	377
	2,4,6-Trichlorophenol	0	0	0	0	317	377
	2,4-Dichlorophenol	0	0	0	0	317	377
	2,4-Dimethylphenol	0	0	0	0	792.667	942.6667
	2,4-Dinitrotoluene	0	0	0	0	15.8667	18.86667
	2,6-Dinitrotoluene	0	0	0	0	31.7	37.7
	2-Chloronaphthalene	0	0	0	0	15.8667	18.86667
	2-Chlorophenol	0	0	0	0	317	377
	3,4,5-Trichloroguaiacol	0	0	0	0	792.667	942.6667
	3,4,6-Trichloroguaiacol	0	0	0	0	317	377
	3,4-Dichloroguaiacol	0	0	0	0	792.667	942.6667
	4,5,6-Trichloroguaiacol	0	0	0	0	792.667	942.6667
	4,5-Dichloroguaiacol	0	0	0	0	792.667	942.6667
	4,6-Dichloroguaiacol	0	0	0	0	792.667	942.6667
	4-Bromophenyl-Phenylether	0	0	0	0	7.93333	9.433333
	4-Chloro-3-methylphenol	0	0	0	0	317	377
	4-Chloroguaiacol	0	0	0	0	792.667	942.6667
	4-Chlorophenyl-Phenylether	0	0	0	0	7.93333	9.433333
	9H-Fluorene	0	0	0	0	7.93333	9.433333
	Acenaphthene	0	0	0	0	15.8667	18.86667
	Acenaphthylene	0	0	0	0	7.93333	9.433333
	Aldrin	0	0	0	0	1.93333	1.966667
	Alpha-BHC	0	0	0	0	1.93333	1.966667
	Alpha-Chlordene	0	0	0	0	1.93333	1.966667
	Aluminum	1	3	1266.67	98700	1933.33	98700
	Anthracene	0	0	0	0	7.93333	9.433333
	Antimony	0	0	0	0	50	50
	Arsenic	3	3	65	220	65	220
	Barium	3	3	919.333	4373.333	919.333	4373.333
	Benzene, 1,2-dichloro-	0	0	0	0	7.93333	9.433333
	Benzene, 1,3-dichloro-	0	0	0	0	7.93333	9.433333
	Benzene, 1,4-dichloro-	0	0	0	0	7.93333	9.433333
	Benzo(a)anthracene	0	0	0	0	7.93333	9.433333

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Benzo(a)pyrene	0	0	0	0	7.93333	9.433333
	Benzo(g,h,i)perylene	0	0	0	0	15.8667	18.86667
	Benzo[b]Fluoranthene	0	0	0	0	7.93333	9.433333
	Benzo[k]fluoranthene	0	0	0	0	7.93333	9.433333
	Beryllium	0	2	0	3.466667	4	4.8
	Beta-BHC	0	0	0	0	1.93333	1.966667
	bis(2-Chloroisopropyl)ether	0	0	0	0	19	18.86667
	Cadmium	3	3	18	216.6667	18	216.6667
	Chromium	3	3	366.667	513.6667	366.667	513.6667
	Chrysene	0	0	0	0	7.93333	9.433333
	cis-Chlordane (alpha-Chlordane)	0	0	0	0	1.93333	1.966667
	cis-Nonachlor	0	0	0	0	1.93333	1.966667
	Cobalt	3	3	155.667	198	155.667	198
	Copper	3	3	436.667	2846.667	436.667	2846.667
	DDMU	3	3	7.4	15	7.4	15
	Delta-BHC	0	0	0	0	1.93333	1.966667
	Dibenz[a,h]anthracene	0	0	0	0	15.8667	18.86667
	Dibenzofuran	0	0	0	0	7.93333	9.433333
	Endosulfan Sulfate	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Fluoranthene	0	0	0	0	15.8667	18.86667
	Gamma-Chlordane	0	0	0	0	1.93333	1.966667
	Gamma-Chlordene	0	0	0	0	1.93333	1.966667
	Heptachlor	0	0	0	0	1.93333	1.966667
	Heptachlor Epoxide	0	0	0	#DIV/0!	1.9	#DIV/0!
	Hexachlorobenzene	0	1	0	0.433333	1.93333	1.766667
	Hexachlorobutadiene	0	0	0	0	7.93333	9.433333
	Hexachloroethane	0	0	0	0	7.93333	9.433333
	Indeno(1,2,3-cd)pyrene	0	0	0	0	15.8667	18.86667
	Lead	2	3	86	731	89.3333	731
	Lindane	0	0	0	0	1.93333	1.966667
	Manganese	3	3	4483.33	19233.33	4483.33	19233.33
	Mercury	3	3	185	114.3333	185	114.3333
	Mirex	0	0	0	0	1.93333	1.966667
	Naphthalene	0	0	0	0	21.6667	19.53333
	Naphthalene, 1-methyl-	0	0	0	0	7.93333	9.433333
	Naphthalene, 2-methyl-	0	0	0	0	7.93333	9.433333
	Nickel	2	3	299.667	5633.333	309.667	5633.333
	Nitrobenzene	0	0	0	0	7.93333	9.433333
	n-Nitrosodiphenylamine	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	3	3	0.00085	0.000543	0.00085	0.000543
	OCDF	2	1	6.3E-05	1.33E-05	0.00007	0.00002
	Oxychlordane	0	0	0	0	1.93333	1.966667
	PCB 105	3	3	2.34	4.213333	2.34	4.213333
	PCB 114	3	3	0.20967	0.366667	0.20967	0.366667
	PCB 118	3	3	5.13667	9.31	5.13667	9.31
	PCB 123	3	3	0.09517	0.163	0.09517	0.163

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	PCB 126	3	3	0.00942	0.0163	0.00942	0.0163
	PCB 156	3	3	1.068	1.796667	1.068	1.796667
	PCB 157	3	3	0.209	0.348667	0.209	0.348667
	PCB 167	3	3	0.45433	0.801667	0.45433	0.801667
	PCB 169	0	0	0	0	0.00171	0.001697
	PCB 170	3	3	1.80967	3.65	1.80967	3.65
	PCB 180	3	3	5.51333	10.76	5.51333	10.76
	PCB 189	3	3	0.08937	0.152433	0.08937	0.152433
	Pentachloroanisol	0	0	0	0	1.93333	1.966667
	Pentachlorophenol	0	0	0	0	317	377
	Phenanthrene	0	0	0	0	7.93333	9.433333
	Phenol	0	0	0	0	317	377
	Pyrene	0	0	0	0	15.8667	18.86667
	Retene	0	0	0	0	15.8667	18.86667
	Selenium	3	3	280	356.6667	280	356.6667
	Silver	0	0	0	0	100	100
	Tetrachloroguaiacol	0	0	0	0	317	377
	Thallium	0	0	0	0	50	50
	Toxaphene	0	0	0	0	58.3333	58
	trans-Nonachlor	0	3	0	1.6	1.93333	1.6
	Vanadium	0	3	0	365.6667	10	365.6667
	Zinc	3	3	25366.7	35566.67	25366.7	35566.67
	PCB 077	3	3	0.03507	0.073767	0.03507	0.073767
	Aroclor 1016	0	0	0	0	19.3333	19.66667
	Aroclor 1221	0	0	0	0	19.3333	19.66667
	Aroclor 1232	0	0	0	0	19.3333	19.66667
	Aroclor 1242	0	0	0	0	19.3333	19.66667
	Aroclor 1248	0	0	0	0	19.3333	19.66667
	Aroclor 1254	3	3	31.3333	48.33333	31.3333	48.33333
	Aroclor 1260	3	3	37.6667	76.66667	37.6667	76.66667
	DDD-o,p'	3	3	3	7.933333	3	7.933333
	DDE-o,p'	3	3	4	7.266667	4	7.266667
	DDT-o,p'	0	0	0	0	1.93333	1.966667
	DDD-p,p'	2	2	25.6667	56	26.3333	56.66667
	DDE-p,p'	3	3	320	540	320	540
	DDT-p,p'	3	3	20.4333	29.33333	20.4333	29.33333
Sta. 13	1,2,3,4,6,7,8-HpCDD	2	2	5.7E-05	0.00019	0.00006	0.0002
	1,2,3,4,6,7,8-HpCDF	0	0	0	0	0.00002	2.67E-05
	1,2,3,4,7,8,9-HpCDF	0	0	0	0	0.00002	2.67E-05
	1,2,3,4,7,8-HxCDD	0	2	0	1.33E-05	0.00001	1.67E-05
	1,2,3,4,7,8-HxCDF	1	0	3.3E-06	0	0.00001	2.33E-05
	1,2,3,6,7,8-HxCDD	2	0	0.00002	0	2.3E-05	1.33E-05
	1,2,3,6,7,8-HxCDF	0	0	0	0	0.00001	2.33E-05
	1,2,3,7,8,9-HxCDD	2	3	1.3E-05	2.33E-05	1.7E-05	2.33E-05
	1,2,3,7,8,9-HxCDF	1	0	3.3E-06	0	0.00001	2.33E-05
	1,2,3,7,8-PeCDD	2	1	0.00002	0.00001	2.3E-05	2.67E-05

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	1,2,3,7,8-PeCDF	0	0	0	0	1.3E-05	0.00003
	1,2,4-Trichlorobenzene	0	0	0	0	8.83333	9.333333
	1,2-Diphenylhydrazine	0	0	0	0	8.83333	9.333333
	2,3,4,6,7,8-HxCDF	0	0	0	0	0.00001	2.33E-05
	2,3,4,6-Tetrachlorophenol	0	0	0	0	354	373.3333
	2,3,4,7,8-PeCDF	1	1	6.7E-06	6.67E-06	1.7E-05	0.00003
	2,3,7,8-TCDD	0	1	0	0.00001	1.3E-05	2.67E-05
	2,3,7,8-TCDF	2	3	7.3E-05	0.00021	7.7E-05	0.00021
	2,4,5-Trichlorophenol	0	0	0	0	354	373.3333
	2,4,6-Trichlorophenol	0	0	0	0	354	373.3333
	2,4-Dichlorophenol	0	0	0	0	354	373.3333
	2,4-Dimethylphenol	0	0	0	0	884.667	934.3333
	2,4-Dinitrotoluene	0	0	0	0	17.7	18.7
	2,6-Dinitrotoluene	0	0	0	0	35.4	37.33333
	2-Chloronaphthalene	0	0	0	0	17.7	18.7
	2-Chlorophenol	0	0	0	0	354	373.3333
	3,4,5-Trichloroguaiacol	0	0	0	0	884.667	934.3333
	3,4,6-Trichloroguaiacol	0	0	0	0	354	373.3333
	3,4-Dichloroguaiacol	0	0	0	0	884.667	934.3333
	4,5,6-Trichloroguaiacol	0	0	0	0	884.667	934.3333
	4,5-Dichloroguaiacol	0	0	0	0	884.667	934.3333
	4,6-Dichloroguaiacol	0	0	0	0	884.667	934.3333
	4-Bromophenyl-Phenylether	0	0	0	0	8.83333	9.333333
	4-Chloro-3-methylphenol	0	0	0	0	354	373.3333
	4-Chloroguaiacol	0	0	0	0	884.667	934.3333
	4-Chlorophenyl-Phenylether	0	0	0	0	8.83333	9.333333
	9H-Fluorene	0	1	0	3.1	8.83333	9.366667
	Acenaphthene	0	0	0	0	17.7	18.7
	Acenaphthylene	0	0	0	0	8.83333	9.333333
	Aldrin	0	0	0	0	1.96667	2
	Alpha-BHC	0	0	0	0	1.96667	2
	Alpha-Chlordene	0	0	0	0	1.96667	2
	Aluminum	3	3	2019	123333.3	2019	123333.3
	Anthracene	0	0	0	0	8.83333	9.333333
	Antimony	0	0	0	0	50	50
	Arsenic	3	3	88.6667	233.3333	88.6667	233.3333
	Barium	3	3	1364.33	3233.333	1364.33	3233.333
	Benzene, 1,2-dichloro-	0	0	0	0	8.83333	9.333333
	Benzene, 1,3-dichloro-	0	0	0	0	8.83333	9.333333
	Benzene, 1,4-dichloro-	0	0	0	0	8.83333	9.333333
	Benzo(a)anthracene	1	0	2.4	0	8.26667	9.333333
	Benzo(a)pyrene	1	0	2.26667	0	8.13333	9.333333
	Benzo(g,h,i)perylene	1	0	6.86667	0	18.6333	18.7
	Benzo[b]Fluoranthene	1	0	4.9	0	10.7667	9.333333
	Benzo[k]fluoranthene	1	0	3.26667	0	9.13333	9.333333
	Beryllium	0	3	0	6	4	6

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Beta-BHC	0	0	0	0	1.96667	2
	bis(2-Chloroisopropyl)ether	0	0	0	0	17.7	18.7
	Cadmium	0	3	0	39	4	39
	Chromium	2	3	90	440	123.333	440
	Chrysene	1	0	3.4	0	9.26667	9.333333
	cis-Chlordane (alpha-Chlordane)	0	0	0	0	1.96667	2
	cis-Nonachlor	0	0	0	0	1.96667	2
	Cobalt	3	3	93.3333	333.3333	93.3333	333.3333
	Copper	3	3	480.667	1118.667	480.667	1118.667
	DDMU	2	2	2.9	1.966667	3.53333	2.633333
	Delta-BHC	0	0	0	0	1.96667	2
	Dibenz[a,h]anthracene	1	0	7.6	0	19.3667	18.7
	Dibenzofuran	0	0	0	0	8.83333	9.333333
	Endosulfan Sulfate	0	0	0	0	1.96667	2
	Fluoranthene	0	0	0	0	17.7	18.7
	Gamma-Chlordane	0	0	0	0	1.96667	2
	Gamma-Chlordene	0	0	0	0	1.96667	2
	Heptachlor	0	0	0	0	1.96667	2
	Heptachlor Epoxide	0	0	0	0	1.96667	2
	Hexachlorobenzene	0	0	0	0	1.96667	2
	Hexachlorobutadiene	0	0	0	0	8.83333	9.333333
	Hexachloroethane	0	0	0	0	8.83333	9.333333
	Indeno(1,2,3-cd)pyrene	1	0	8.23333	0	20	18.7
	Lead	3	3	22	99.33333	22	99.33333
	Lindane	0	0	0	0	1.96667	2
	Manganese	3	3	2650	16166.67	2650	16166.67
	Mercury	3	3	360.667	187.3333	360.667	187.3333
	Mirex	0	0	0	0	1.96667	2
	Naphthalene	0	0	0	0	13.5	20.93333
	Naphthalene, 1-methyl-	0	0	0	0	8.83333	9.333333
	Naphthalene, 2-methyl-	0	0	0	0	8.83333	18.83333
	Nickel	3	3	46.3333	435.3333	46.3333	435.3333
	Nitrobenzene	0	0	0	0	8.83333	9.333333
	n-Nitrosodiphenylamine	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	2	3	0.00009	0.001743	9.3E-05	0.001743
	OCDF	0	2	0	0.000217	0.00003	0.00022
	Oxychlordane	0	0	0	0	1.96667	2
	PCB 105	3	3	0.16033	0.272667	0.16033	0.272667
	PCB 114	3	3	0.0139	0.022233	0.0139	0.022233
	PCB 118	3	3	0.404	0.648667	0.404	0.648667
	PCB 123	3	3	0.00673	0.01066	0.00673	0.01066
	PCB 126	0	0	0	0	0.00079	0.000953
	PCB 156	3	3	0.09703	0.142667	0.09703	0.142667
	PCB 157	3	3	0.017	0.027633	0.017	0.027633
	PCB 167	3	3	0.04533	0.062933	0.04533	0.062933
	PCB 169	1	0	0.02973	0	0.03118	0.002937

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	PCB 170	3	3	0.18333	0.222333	0.18333	0.222333
	PCB 180	3	3	0.60467	0.729333	0.60467	0.729333
	PCB 189	3	3	0.00856	0.009967	0.00856	0.009967
	Pentachloroanisol	0	0	0	0	1.96667	2
	Pentachlorophenol	0	0	0	0	354	373.3333
	Phenanthrene	0	0	0	0	8.83333	9.333333
	Phenol	0	0	0	0	354	373.3333
	Pyrene	0	0	0	0	17.7	15.76667
	Retene	0	0	0	0	17.7	18.7
	Selenium	3	3	353.333	423.3333	353.333	423.3333
	Silver	0	0	0	0	100	100
	Tetrachloroguaiacol	0	0	0	0	354	373.3333
	Thallium	0	0	0	0	50	50
	Toxaphene	0	0	0	0	59	59
	trans-Nonachlor	0	1	0	0.4	1.96667	1.733333
	Vanadium	3	3	14.6667	443.3333	14.6667	443.3333
	Zinc	3	3	18733.3	23600	18733.3	23600
	PCB 077	3	3	0.00512	0.009217	0.00512	0.009217
	Aroclor 1016	0	0	0	0	19.6667	20
	Aroclor 1221	0	0	0	0	19.6667	20
	Aroclor 1232	0	0	0	0	19.6667	20
	Aroclor 1242	0	0	0	0	19.6667	20
	Aroclor 1248	0	0	0	0	19.6667	20
	Aroclor 1254	0	1	0	4.666667	19.6667	18
	Aroclor 1260	0	0	0	0	19.6667	20
	DDD-o,p'	1	2	0.5	1.9	1.8	2.566667
	DDE-o,p'	1	2	0.4	0.866667	1.7	1.533333
	DDT-o,p'	1	2	1.76667	0.866667	3.06667	1.533333
	DDD-p,p'	2	3	2.16667	5.9	2.83333	5.9
	DDE-p,p'	3	3	62	78	62	78
	DDT-p,p'	3	3	2.03333	5.6	2.03333	5.6
Sta. 30	1,2,3,4,6,7,8-HpCDD	4	2	0.00015	0.000117	0.00015	0.00012
	1,2,3,4,6,7,8-HpCDF	3	3	9.3E-05	8.67E-05	9.5E-05	8.67E-05
	1,2,3,4,7,8,9-HpCDF	1	0	3.3E-05	0	0.00004	0.00001
	1,2,3,4,7,8-HxCDD	4	3	0.00011	9.67E-05	0.00011	9.67E-05
	1,2,3,4,7,8-HxCDF	2	2	2.8E-05	1.33E-05	3.3E-05	1.67E-05
	1,2,3,6,7,8-HxCDD	2	2	4.3E-05	0.00004	4.8E-05	4.33E-05
	1,2,3,6,7,8-HxCDF	3	3	3.8E-05	0.00003	0.00004	0.00003
	1,2,3,7,8,9-HxCDD	2	3	3.3E-05	4.33E-05	3.8E-05	4.33E-05
	1,2,3,7,8,9-HxCDF	3	3	8.5E-05	6.67E-05	8.8E-05	6.67E-05
	1,2,3,7,8-PeCDD	4	3	0.00013	0.000123	0.00013	0.000123
	1,2,3,7,8-PeCDF	3	3	2.8E-05	3.67E-05	0.00003	3.67E-05
	1,2,4-Trichlorobenzene	0	0	0	0	5	6.8
	1,2-Diphenylhydrazine	0	0	0	0	5	6.8
	2,3,4,6,7,8-HxCDF	3	3	0.00013	0.000137	0.00013	0.000137
	2,3,4,6-Tetrachlorophenol	0	0	0		204.333	

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	2,3,4,7,8-PeCDF	4	3	0.00004	4.33E-05	0.00004	4.33E-05
	2,3,7,8-TCDD	3	2	4.8E-05	4.67E-05	0.00005	0.00005
	2,3,7,8-TCDF	4	3	0.0003	0.00042	0.0003	0.00042
	2,4,5-Trichlorophenol	0	0	0		204.333	
	2,4,6-Trichlorophenol	0	0	0	0	200.25	272
	2,4-Dichlorophenol	0	0	0	0	200.25	272
	2,4-Dimethylphenol	0	0	0	0	500.625	680
	2,4-Dinitrotoluene	0	0	0	0	9.975	13.6
	2,6-Dinitrotoluene	0	0	0	0	20	27.2
	2-Chloronaphthalene	0	0	0	0	9.975	13.6
	2-Chlorophenol	0	0	0	0	200.25	272
	3,4,5-Trichloroguaiacol	0	0	0	0	500.625	680
	3,4,6-Trichloroguaiacol	0	0	0	0	200.25	272
	3,4-Dichloroguaiacol	0	0	0	0	500.625	680
	4,5,6-Trichloroguaiacol	0	0	0	0	500.625	680
	4,5-Dichloroguaiacol	0	0	0	0	500.625	680
	4,6-Dichloroguaiacol	0	0	0	0	500.625	680
	4-Bromophenyl-Phenylether	0	0	0	0	5	6.8
	4-Chloro-3-methylphenol	0	0	0	0	200.25	272
	4-Chloroguaiacol	0	0	0	0	500.625	680
	4-Chlorophenyl-Phenylether	0	0	0	0	5	6.8
	9H-Fluorene	0	0	0	0	5	6.8
	Acenaphthene	0	0	0	0	9.975	13.6
	Acenaphthylene	0	0	0	0	5	6.8
	Aldrin	0	0	0	0	2.3	2.566667
	Alpha-BHC	0	0	0	0	2.3	2.566667
	Alpha-Chlordene	0	0	0	0	2.3	2.566667
	Aluminum	4	3	2857.5	52266.67	2857.5	52266.67
	Anthracene	0	0	0	0	5	6.8
	Antimony	0	0	0	0	50	50
	Arsenic	4	3	80.5	130	80.5	130
	Barium	4	3	736.25	2076.667	736.25	2076.667
	Benzene, 1,2-dichloro-	0	0	0	0	5	6.8
	Benzene, 1,3-dichloro-	0	0	0	0	5	6.8
	Benzene, 1,4-dichloro-	0	0	0	0	5	6.8
	Benzo(a)anthracene	0	0	0	0	5	6.8
	Benzo(a)pyrene	0	0	0	0	5	6.8
	Benzo(g,h,i)perylene	0	0	0	0	9.975	13.6
	Benzo[b]Fluoranthene	0	0	0	0	5	6.8
	Benzo[k]fluoranthene	0	0	0	0	5	6.8
	Beryllium	2	0	2.225	0	4.225	10
	Beta-BHC	0	0	0	0	2.3	2.566667
	bis(2-Chloroisopropyl)ether	0	0	0	0	9.975	13.6
	Cadmium	1	3	1	18.66667	4	18.66667
	Chromium	1	3	32.5	136.6667	107.5	136.6667
	Chrysene	0	0	0	0	5	6.8

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	cis-Chlordane (alpha-Chlordane)	0	0	0	0	2.3	2.566667
	cis-Nonachlor	0	0	0	0	2.3	2.566667
	Cobalt	4	3	25	71.66667	25	71.66667
	Copper	4	3	572.75	1176.667	572.75	1176.667
	DDMU	0	0	0	0	2.3	2.566667
	Delta-BHC	0	0	0	0	2.3	2.566667
	Dibenz[a,h]anthracene	0	0	0	0	9.975	13.6
	Dibenzofuran	0	0	0	0	5	6.8
	Endosulfan Sulfate	0	0	0	0	2.3	2.566667
	Fluoranthene	0	0	0	0	9.975	13.6
	Gamma-Chlordane	0	0	0	0	2.3	2.566667
	Gamma-Chlordene	0	0	0	0	2.3	2.566667
	Heptachlor	0	0	0	0	2.3	2.566667
	Heptachlor Epoxide	0	0	0	0	2.3	2.566667
	Hexachlorobenzene	0	0	0	0	2.3	2.566667
	Hexachlorobutadiene	0	0	0	0	5	6.8
	Hexachloroethane	0	0	0	0	5	6.8
	Indeno(1,2,3-cd)pyrene	0	0	0	0	9.975	13.6
	Lead	4	3	24.25	39.33333	24.25	39.33333
	Lindane	0	0	0	0	2.3	2.566667
	Manganese	4	3	2122.5	8993.333	2122.5	8993.333
	Mercury	4	3	263.25	60.33333	263.25	60.33333
	Mirex	0	0	0	0	2.3	2.566667
	Naphthalene	0	0	0	0	10.375	15.86667
	Naphthalene, 1-methyl-	0	1	0	2.833333	5	8.066667
	Naphthalene, 2-methyl-	2	2	3.475	9.166667	6.375	13.16667
	Nickel	4	3	131.75	431	131.75	431
	Nitrobenzene	0	0	0	0	5	6.8
	n-Nitrosodiphenylamine	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	4	3	0.00022	0.000497	0.00022	0.000497
	OCDF	4	2	9.5E-05	5.33E-05	9.5E-05	5.67E-05
	Oxychlordane	0	0	0	0	2.3	2.566667
	PCB 105	4	3	0.415	0.361667	0.415	0.361667
	PCB 114	4	3	0.0375	0.028133	0.0375	0.028133
	PCB 118	4	3	0.89425	0.762667	0.89425	0.762667
	PCB 123	4	3	0.01818	0.013667	0.01818	0.013667
	PCB 126	0	0	0	0	0.002	0.000487
	PCB 156	4	3	0.21175	0.171	0.21175	0.171
	PCB 157	0	0	0	0	0.00148	0.002047
	PCB 167	4	3	0.1012	0.077867	0.1012	0.077867
	PCB 169	0	0	0	0	0.00098	0.00171
	PCB 170	4	3	0.46425	0.402667	0.46425	0.402667
	PCB 180	4	3	1.5525	1.231667	1.5525	1.231667
	PCB 189	4	3	0.0195	0.017833	0.0195	0.017833
	Pentachloroanisol	0	0	0	0	2.3	2.566667
	Pentachlorophenol	0	0	0	0	200.25	272

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Phenanthrene	0	1	0	1.6	5	6.833333
	Phenol	0	0	0	0	200.25	272
	Pyrene	0	0	0	0	9.975	13.6
	Retene	0	0	0	0	9.975	13.6
	Selenium	4	3	277.5	320	277.5	320
	Silver	0	0	0	0	100	100
	Tetrachloroguaiacol	0	0	0	0	200.25	272
	Thallium	0	0	0	0	50	50
	Toxaphene	0	0	0	0	59	76.33333
	trans-Nonachlor	0	0	0	0	2.3	2.566667
	Vanadium	4	3	14.75	297.3333	14.75	297.3333
	Zinc	4	3	16925	19166.67	16925	19166.67
	PCB 077	4	3	0.01763	0.0352	0.01763	0.0352
	Aroclor 1016	0	0	0	0	18.5	19.66667
	Aroclor 1221	0	0	0	0	18.5	19.66667
	Aroclor 1232	0	0	0	0	18.5	19.66667
	Aroclor 1242	0	0	0	0	18.5	19.66667
	Aroclor 1248	0	0	0	0	18.5	19.66667
	Aroclor 1254	1	0	2.5	0	16.25	19.66667
	Aroclor 1260	3	3	13.25	14.33333	18	14.33333
	DDD-o,p'	0	0	0	0	2.3	2.566667
	DDE-o,p'	0	3	0	4.866667	2.3	4.866667
	DDT-o,p'	0	0	0	0	2.3	2.566667
	DDD-p,p'	4	3	5.925	8.466667	5.925	8.466667
	DDE-p,p'	4	3	62.5	42.33333	62.5	42.33333
	DDT-p,p'	3	3	2.425	3.633333	2.975	3.633333
Sta. 48	1,2,3,4,6,7,8-HpCDD	2	6	6.3E-05	0.000335	6.7E-05	0.000335
	1,2,3,4,6,7,8-HpCDF	0	4	0	6.83E-05	3.3E-05	7.83E-05
	1,2,3,4,7,8,9-HpCDF	0	0	0	0	3.3E-05	0.00002
	1,2,3,4,7,8-HxCDD	0	5	0	7.33E-05	2.7E-05	0.000075
	1,2,3,4,7,8-HxCDF	1	5	3.3E-06	0.00002	2.3E-05	2.17E-05
	1,2,3,6,7,8-HxCDD	2	4	4.7E-05	0.0001	5.7E-05	0.000103
	1,2,3,6,7,8-HxCDF	0	3	0	0.000015	2.3E-05	0.00002
	1,2,3,7,8,9-HxCDD	1	4	1.3E-05	3.33E-05	2.7E-05	3.67E-05
	1,2,3,7,8,9-HxCDF	0	3	0	2.67E-05	2.3E-05	3.17E-05
	1,2,3,7,8-PeCDD	1	4	3.3E-05	0.000122	4.7E-05	0.000125
	1,2,3,7,8-PeCDF	0	5	0	3.67E-05	2.3E-05	3.83E-05
	1,2,4-Trichlorobenzene	0	0	0	0	8.4	7.083333
	1,2-Diphenylhydrazine	0	0	0	0	8.4	7.083333
	2,3,4,6,7,8-HxCDF	0	3	0	0.00007	2.3E-05	0.000075
	2,3,4,6-Tetrachlorophenol	0	0	0	0	335	354.6667
	2,3,4,7,8-PeCDF	1	6	3.3E-05	0.000127	0.00005	0.000127
	2,3,7,8-TCDD	2	4	2.7E-05	5.83E-05	3.7E-05	6.33E-05
	2,3,7,8-TCDF	3	6	0.00029	0.000527	0.00029	0.000527
	2,4,5-Trichlorophenol	0	0	0	0	335	354.6667
	2,4,6-Trichlorophenol	0	0	0	0	335	283.5

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	2,4-Dichlorophenol	0	0	0	0	335	283.5
	2,4-Dimethylphenol	0	0	0	0	837.333	708.9167
	2,4-Dinitrotoluene	0	0	0	0	16.7333	14.2
	2,6-Dinitrotoluene	0	0	0	0	33.5	28.35
	2-Chloronaphthalene	0	0	0	0	16.7333	14.2
	2-Chlorophenol	0	0	0	0	335	283.5
	3,4,5-Trichloroguaiacol	0	0	0	0	837.333	708.9167
	3,4,6-Trichloroguaiacol	0	0	0	0	335	283.5
	3,4-Dichloroguaiacol	0	0	0	0	837.333	708.9167
	4,5,6-Trichloroguaiacol	0	0	0	0	837.333	708.9167
	4,5-Dichloroguaiacol	0	0	0	0	837.333	708.9167
	4,6-Dichloroguaiacol	0	0	0	0	837.333	708.9167
	4-Bromophenyl-Phenylether	0	0	0	0	8.4	7.083333
	4-Chloro-3-methylphenol	0	0	0	0	335	283.5
	4-Chloroguaiacol	0	0	0	0	837.333	708.9167
	4-Chlorophenyl-Phenylether	0	0	0	0	8.4	7.083333
	9H-Fluorene	0	0	0	0	8.4	7.083333
	Acenaphthene	0	0	0	0	16.7333	14.2
	Acenaphthylene	0	0	0	0	8.4	7.083333
	Aldrin	0	0	0	0	2	2.183333
	Alpha-BHC	0	0	0	0	2	2.183333
	Alpha-Chlordene	0	0	0	0	2	2.183333
	Aluminum	2	6	1142	49016.67	1475.33	49016.67
	Anthracene	0	0	0	0	8.4	7.083333
	Antimony	0	0	0	0	50	50
	Arsenic	3	6	56.3333	104.8333	56.3333	104.8333
	Barium	3	6	687	1870	687	1870
	Benzene, 1,2-dichloro-	0	0	0	0	8.4	7.083333
	Benzene, 1,3-dichloro-	0	0	0	0	8.4	7.083333
	Benzene, 1,4-dichloro-	0	0	0	0	8.4	7.083333
	Benzo(a)anthracene	0	0	0	0	8.4	7.083333
	Benzo(a)pyrene	0	0	0	0	8.4	7.083333
	Benzo(g,h,i)perylene	0	0	0	0	16.7333	14.2
	Benzo[b]Fluoranthene	0	0	0	0	8.4	7.083333
	Benzo[k]fluoranthene	0	0	0	0	8.4	7.083333
	Beryllium	0	1	0	1.15	4	4.483333
	Beta-BHC	0	0	0	0	2	2.183333
	bis(2-Chloroisopropyl)ether	0	0	0	0	16.7333	14.2
	Cadmium	0	6	0	23.83333	4	23.83333
	Chromium	2	6	90	243.3333	123.333	243.3333
	Chrysene	0	0	0	0	8.4	7.083333
	cis-Chlordane (alpha-Chlordane)	2	0	0.83333	0	1.5	2.183333
	cis-Nonachlor	0	2	0	4.5	2	6.1
	Cobalt	3	6	81	127	81	127
	Copper	3	6	592.667	1110.333	592.667	1110.333
	DDMU	3	6	14	21.5	14	21.5

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Delta-BHC	0	0	0	0	2	2.183333
	Dibenz[a,h]anthracene	0	0	0	0	16.7333	14.2
	Dibenzofuran	0	0	0	0	8.4	7.083333
	Endosulfan Sulfate	3	2	1.93333	1.416667	1.93333	2.833333
	Fluoranthene	0	0	0	0	16.7333	14.2
	Gamma-Chlordane	0	0	0	0	2	2.183333
	Gamma-Chlordene	0	0	0	0	2	2.183333
	Heptachlor	0	0	0	0	2	2.183333
	Heptachlor Epoxide	0	0	0	0	2	2.183333
	Hexachlorobenzene	0	1	0	0.2	2	2.066667
	Hexachlorobutadiene	0	0	0	0	8.4	7.083333
	Hexachloroethane	0	0	0	0	8.4	7.083333
	Indeno(1,2,3-cd)pyrene	0	0	0	0	16.7333	14.2
	Lead	3	6	15.6667	62.83333	15.6667	62.83333
	Lindane	0	0	0	0	2	2.183333
	Manganese	3	6	3393.33	16900	3393.33	16900
	Mercury	3	6	288.333	154.8333	288.333	154.8333
	Mirex	1	1	0.43333	0.316667	1.76667	2.183333
	Naphthalene	0	0	0	0	13.8333	10.51667
	Naphthalene, 1-methyl-	0	1	0	0.816667	8.4	7.1
	Naphthalene, 2-methyl-	0	3	0	5.066667	8.4	9.5
	Nickel	3	6	53	385.8333	53	385.8333
	Nitrobenzene	0	0	0	0	8.4	7.083333
	n-Nitrosodiphenylamine	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	2	6	0.00013	0.000785	0.00014	0.000785
	OCDF	0	5	0	0.00007	5.3E-05	7.17E-05
	Oxychlordane	0	1	0	0.161667	2	2.028333
	PCB 105	3	6	0.63167	0.838	0.63167	0.838
	PCB 114	3	6	0.0466	0.065517	0.0466	0.065517
	PCB 118	3	6	1.62667	1.803833	1.62667	1.803833
	PCB 123	3	6	0.02283	0.036033	0.02283	0.036033
	PCB 126	0	0	0	0	0.00147	0.002748
	PCB 156	3	6	0.49367	0.627667	0.49367	0.627667
	PCB 157	3	3	0.07327	0.054167	0.07327	0.057118
	PCB 167	3	6	0.26067	0.311667	0.26067	0.311667
	PCB 169	0	0	0	0	0.00316	0.005732
	PCB 170	3	6	1.76	1.732	1.76	1.732
	PCB 180	3	6	6.50333	5.375	6.50333	5.375
	PCB 189	3	6	0.08267	0.083483	0.08267	0.083483
	Pentachloroanisol	1	2	0.32667	0.38	1.66	1.98
	Pentachlorophenol	0	0	0	0	335	283.5
	Phenanthrene	0	0	0	0	8.4	7.083333
	Phenol	0	0	0	0	335	283.5
	Pyrene	0	0	0	0	16.7333	14.2
	Retene	0	0	0	0	16.7333	14.2
	Selenium	3	6	286.667	336.6667	286.667	336.6667

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Silver	0	0	0	0	100	100
	Tetrachloroguaiacol	0	0	0	0	335	283.5
	Thallium	0	0	0	0	50	50
	Toxaphene	0	0	0	0	59.3333	65.83333
	trans-Nonachlor	3	3	3.13333	3.2	3.13333	4.483333
	Vanadium	0	6	0	274	10	274
	Zinc	3	6	20200	22316.67	20200	22316.67
	PCB 077	3	6	0.0248	0.035267	0.0248	0.035267
	Aroclor 1016	0	0	0	0	20	19.33333
	Aroclor 1221	0	0	0	0	20	19.33333
	Aroclor 1232	0	0	0	0	20	19.33333
	Aroclor 1242	0	0	0	0	20	19.33333
	Aroclor 1248	0	0	0	0	20	19.33333
	Aroclor 1254	3	6	18.6667	36.16667	18.6667	36.16667
	Aroclor 1260	3	6	56	76.83333	56	76.83333
	DDD-o,p'	3	6	5.46667	9.316667	5.46667	9.316667
	DDE-o,p'	3	6	3.3	6.016667	3.3	6.016667
	DDT-o,p'	3	1	8.7	2.833333	8.7	4.7
	DDD-p,p'	3	6	20.6667	81.66667	20.6667	81.66667
	DDE-p,p'	3	6	530	888.3333	530	888.3333
	DDT-p,p'	3	6	64.3333	82.66667	64.3333	82.66667
Sta. 49	1,2,3,4,6,7,8-HpCDD	1	3	0.00005	0.0002	5.7E-05	0.0002
	1,2,3,4,6,7,8-HpCDF	2	3	9.7E-05	7.67E-05	0.0001	7.67E-05
	1,2,3,4,7,8,9-HpCDF	1	0	6.3E-05	0	7.3E-05	0.00001
	1,2,3,4,7,8-HxCDD	1	3	0.00003	0.000113	0.00004	0.000113
	1,2,3,4,7,8-HxCDF	2	2	3.3E-05	0.00001	3.7E-05	1.33E-05
	1,2,3,6,7,8-HxCDD	3	2	8.7E-05	5.67E-05	8.7E-05	0.00006
	1,2,3,6,7,8-HxCDF	3	3	0.00005	2.67E-05	0.00005	2.67E-05
	1,2,3,7,8,9-HxCDD	2	2	2.3E-05	0.00002	0.00003	2.33E-05
	1,2,3,7,8,9-HxCDF	2	3	8.7E-05	0.00006	0.00009	0.00006
	1,2,3,7,8-PeCDD	2	3	0.0001	0.00016	0.0001	0.00016
	1,2,3,7,8-PeCDF	3	3	0.00005	0.00004	0.00005	0.00004
	1,2,4-Trichlorobenzene	0	0	0	0	5	25.33333
	1,2-Diphenylhydrazine	0	1	0	40.33333	5	56.96667
	2,3,4,6,7,8-HxCDF	3	3	0.00017	0.00015	0.00017	0.00015
	2,3,4,6-Tetrachlorophenol	0	0	0	0	200.667	202.6667
	2,3,4,7,8-PeCDF	2	3	1.7E-05	4.67E-05	2.3E-05	4.67E-05
	2,3,7,8-TCDD	1	3	1.3E-05	0.00007	2.3E-05	0.00007
	2,3,7,8-TCDF	3	3	0.0001	0.000277	0.0001	0.000277
	2,4,5-Trichlorophenol	0	0	0	0	200.667	202.6667
	2,4,6-Trichlorophenol	0	0	0	0	200.667	202.6667
	2,4-Dichlorophenol	0	0	0	0	200.667	202.6667
	2,4-Dimethylphenol	0	0	0	0	501.667	506.6667
	2,4-Dinitrotoluene	0	0	0	0	10.0333	50.63333
	2,6-Dinitrotoluene	0	0	0	0	20.0667	101.0333
	2-Chloronaphthalene	0	0	0	0	10.0333	50.63333

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	2-Chlorophenol	0	0	0	0	200.667	202.6667
	3,4,5-Trichloroguaiacol	0	0	0	0	501.667	506.6667
	3,4,6-Trichloroguaiacol	0	0	0	0	200.667	202.6667
	3,4-Dichloroguaiacol	0	0	0	0	501.667	506.6667
	4,5,6-Trichloroguaiacol	0	0	0	0	501.667	506.6667
	4,5-Dichloroguaiacol	0	0	0	0	501.667	506.6667
	4,6-Dichloroguaiacol	0	0	0	0	501.667	506.6667
	4-Bromophenyl-Phenylether	0	0	0	0	5	25.33333
	4-Chloro-3-methylphenol	0	0	0	0	200.667	202.6667
	4-Chloroguaiacol	0	0	0	0	501.667	506.6667
	4-Chlorophenyl-Phenylether	0	0	0	0	5	25.33333
	9H-Fluorene	0	0	0	0	5	25.33333
	Acenaphthene	0	0	0	0	10.0333	50.63333
	Acenaphthylene	0	0	0	0	5	25.33333
	Aldrin	0	0	0	0	2.43333	3.266667
	Alpha-BHC	0	0	0	0	2.43333	3.266667
	Alpha-Chlordene	0	0	0	0	2.43333	3.266667
	Aluminum	1	3	466.667	40866.67	8800	40866.67
	Anthracene	0	0	0	0	5	25.33333
	Antimony	0	0	0	0	50	50
	Arsenic	1	3	21	100	54.3333	100
	Barium	3	3	499.667	1366.667	499.667	1366.667
	Benzene, 1,2-dichloro-	0	0	0	0	5	25.33333
	Benzene, 1,3-dichloro-	0	0	0	0	5	25.33333
	Benzene, 1,4-dichloro-	0	0	0	0	5	25.33333
	Benzo(a)anthracene	0	0	0	0	5	25.33333
	Benzo(a)pyrene	0	0	0	0	5	25.33333
	Benzo(g,h,i)perylene	0	0	0	0	10.0333	50.63333
	Benzo[b]Fluoranthene	0	0	0	0	5	25.33333
	Benzo[k]fluoranthene	0	0	0	0	5	25.33333
	Beryllium	1	3	2	6.2	4.66667	6.2
	Beta-BHC	0	0	0	0	2.43333	3.266667
	bis(2-Chloroisopropyl)ether	0	0	0	0	10.0333	50.63333
	Cadmium	0	3	0	23	4	23
	Chromium	0	3	0	190	100	190
	Chrysene	0	0	0	0	5	25.33333
	cis-Chlordane (alpha-Chlordane)	0	0	0	0	2.43333	3.266667
	cis-Nonachlor	0	0	0	0	2.43333	3.266667
	Cobalt	3	3	25.6667	96.66667	25.6667	96.66667
	Copper	3	3	592.667	1393.333	592.667	1393.333
	DDMU	0	0	0	0	2.43333	3.266667
	Delta-BHC	0	0	0	0	2.43333	3.266667
	Dibenz[a,h]anthracene	0	0	0	0	10.0333	50.63333
	Dibenzofuran	0	0	0	0	5	25.33333
	Endosulfan Sulfate	0	0	0	0	2.43333	3.266667
	Fluoranthene	0	0	0	0	10.0333	50.63333

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Gamma-Chlordane	0	0	0	0	2.43333	3.266667
	Gamma-Chlordene	0	0	0	0	2.43333	3.266667
	Heptachlor	0	0	0	0	2.43333	3.266667
	Heptachlor Epoxide	0	0	0	0	2.43333	3.266667
	Hexachlorobenzene	0	0	0	0	2.43333	3.266667
	Hexachlorobutadiene	0	0	0	0	5	25.33333
	Hexachloroethane	0	0	0	0	5	25.33333
	Indeno(1,2,3-cd)pyrene	0	0	0	0	10.0333	50.63333
	Lead	3	3	16	29.66667	16	29.66667
	Lindane	0	0	0	0	2.43333	3.266667
	Manganese	3	3	2236.67	12233.33	2236.67	12233.33
	Mercury	3	3	217	97	217	97
	Mirex	0	0	0	0	2.43333	3.266667
	Naphthalene	0	1	0	22.2	7.63333	38.83333
	Naphthalene, 1-methyl-	0	0	0	0	5	25.33333
	Naphthalene, 2-methyl-	0	0	0	0	5	25.33333
	Nickel	3	3	77.3333	526.3333	77.3333	526.3333
	Nitrobenzene	0	0	0	0	5	25.33333
	n-Nitrosodiphenylamine	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	3	3	0.00032	0.000413	0.00032	0.000413
	OCDF	2	2	0.00012	3.33E-05	0.00012	3.67E-05
	Oxychlordane	0	0	0	0	2.43333	3.266667
	PCB 105	3	3	0.32967	1.139333	0.32967	1.139333
	PCB 114	3	3	0.02573	0.0929	0.02573	0.0929
	PCB 118	3	3	0.79033	2.336667	0.79033	2.336667
	PCB 123	3	3	0.01329	0.041033	0.01329	0.041033
	PCB 126	2	3	0.00102	0.004433	0.00139	0.004433
	PCB 156	3	3	0.15677	0.511	0.15677	0.511
	PCB 157	3	3	0.02009	0.101933	0.02009	0.101933
	PCB 167	3	3	0.06947	0.222667	0.06947	0.222667
	PCB 169	0	0	0	0	0.00067	0.00182
	PCB 170	3	3	0.20433	0.538667	0.20433	0.538667
	PCB 180	3	3	0.60667	1.64	0.60667	1.64
	PCB 189	3	3	0.009	0.0242	0.009	0.0242
	Pentachloroanisol	1	2	0.33333	0.733333	1.93333	2.4
	Pentachlorophenol	0	0	0	0	200.667	202.6667
	Phenanthrene	0	0	0	0	5	25.33333
	Phenol	0	0	0	0	200.667	202.6667
	Pyrene	0	0	0	0	10.0333	50.63333
	Retene	0	0	0	0	10.0333	50.63333
	Selenium	3	3	153.333	216.6667	153.333	216.6667
	Silver	0	0	0	0	100	100
	Tetrachloroguaiacol	0	0	0	0	200.667	202.6667
	Thallium	0	0	0	0	50	50
	Toxaphene	0	0	0	0	59	59
	trans-Nonachlor	0	0	0	0	2.43333	3.266667

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Vanadium	1	3	5.33333	210.6667	15.3333	210.6667
	Zinc	3	3	18400	21500	18400	21500
	PCB 077	3	3	0.00822	0.026033	0.00822	0.026033
	Aroclor 1016	0	0	0	0	19.6667	19.66667
	Aroclor 1221	0	0	0	0	19.6667	19.66667
	Aroclor 1232	0	0	0	0	19.6667	19.66667
	Aroclor 1242	0	0	0	0	19.6667	19.66667
	Aroclor 1248	0	0	0	0	19.6667	19.66667
	Aroclor 1254	2	3	19.6667	28.33333	25.6667	28.33333
	Aroclor 1260	1	2	19.3333	11	32.3333	17.66667
	DDD-o,p'	1	2	4	1.933333	5.6	3.6
	DDE-o,p'	1	2	1.46667	2.766667	3.06667	4.433333
	DDT-o,p'	0	0	0	0	2.43333	3.266667
	DDD-p,p'	3	3	32.2667	16.66667	32.2667	16.66667
	DDE-p,p'	3	3	278.333	186.6667	278.333	186.6667
	DDT-p,p'	3	3	33	45.66667	33	45.66667
Sta. 98	1,2,3,4,6,7,8-HpCDD	2	2	9.7E-05	0.00015	0.00013	0.000157
	1,2,3,4,6,7,8-HpCDF	2	3	4.7E-05	9.67E-05	0.00009	9.67E-05
	1,2,3,4,7,8,9-HpCDF	1	1	1.3E-05	0.00001	0.00008	3.33E-05
	1,2,3,4,7,8-HxCDD	1	3	0.00004	0.00012	0.0001	0.00012
	1,2,3,4,7,8-HxCDF	1	3	1.3E-05	2.33E-05	0.00006	2.33E-05
	1,2,3,6,7,8-HxCDD	1	2	0.00003	0.00008	9.3E-05	0.00009
	1,2,3,6,7,8-HxCDF	1	1	1.3E-05	0.00001	7.3E-05	0.00002
	1,2,3,7,8,9-HxCDD	1	2	2.3E-05	3.33E-05	8.7E-05	4.33E-05
	1,2,3,7,8,9-HxCDF	2	0	7.3E-05	0	0.0001	1.33E-05
	1,2,3,7,8-PeCDD	1	3	0.00005	0.000157	7.3E-05	0.000157
	1,2,3,7,8-PeCDF	1	2	0.00002	3.33E-05	4.3E-05	0.00004
	1,2,4-Trichlorobenzene	0	0	0	0	22.6667	4.833333
	1,2-Diphenylhydrazine	0	0	0	0	22.6667	34.93333
	2,3,4,6,7,8-HxCDF	2	3	9.7E-05	0.000157	0.00012	0.000157
	2,3,4,6-Tetrachlorophenol	0	0	0	0	181.333	
	2,3,4,7,8-PeCDF	0	3	0	0.00006	2.7E-05	0.00006
	2,3,7,8-TCDD	1	1	3.3E-06	1.67E-05	0.00004	0.00003
	2,3,7,8-TCDF	3	3	0.00023	0.000467	0.00023	0.000467
	2,4,5-Trichlorophenol	0	0	0	0	181.333	
	2,4,6-Trichlorophenol	0	0	0	0	181.333	193
	2,4-Dichlorophenol	0	0	0	0	181.333	193
	2,4-Dimethylphenol	0	0	0	0	453.333	482.5
	2,4-Dinitrotoluene	0	0	0	0	45.3667	9.666667
	2,6-Dinitrotoluene	0	0	0	0	90.7667	19.3
	2-Chloronaphthalene	0	0	0	0	45.3667	4.833333
	2-Chlorophenol	0	0	0	0	181.333	193
	3,4,5-Trichloroguaiacol	0	0	0	0	453.333	482.5
	3,4,6-Trichloroguaiacol	0	0	0	0	181.333	193
	3,4-Dichloroguaiacol	0	0	0	0	453.333	482.5
	4,5,6-Trichloroguaiacol	0	0	0	0	453.333	482.5

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	4,5-Dichloroguaiacol	0	0	0	0	453.333	482.5
	4,6-Dichloroguaiacol	0	0	0	0	453.333	482.5
	4-Bromophenyl-Phenylether	0	0	0	0	22.6667	34.93333
	4-Chloro-3-methylphenol	0	0	0	0	181.333	193
	4-Chloroguaiacol	0	0	0	0	453.333	482.5
	4-Chlorophenyl-Phenylether	0	0	0	0	22.6667	4.833333
	9H-Fluorene	0	0	0	0	22.6667	4.833333
	Acenaphthene	0	1	0	12.36667	45.3667	18.86667
	Acenaphthylene	0	2	0	3.1	22.6667	4.7
	Aldrin	0	0	0	0	2	1.866667
	Alpha-BHC	0	0	0	0	2	1.866667
	Alpha-Chlordene	0	0	0	0	2	1.866667
	Aluminum	1	0	333.333	0	3666.67	15000
	Anthracene	0	0	0	0	22.6667	34.93333
	Antimony	0	0	0	0	50	50
	Arsenic	3	3	91.3333	133.3333	91.3333	133.3333
	Barium	3	3	583.333	1066.667	583.333	1066.667
	Benzene, 1,2-dichloro-	0	0	0	0	22.6667	4.833333
	Benzene, 1,3-dichloro-	0	0	0	0	22.6667	4.833333
	Benzene, 1,4-dichloro-	0	0	0	0	22.6667	4.833333
	Benzo(a)anthracene	0	0	0	0	22.6667	66.26667
	Benzo(a)pyrene	0	0	0	0	22.6667	96.53333
	Benzo(g,h,i)perylene	0	0	0	0	45.3667	193
	Benzo[b]Fluoranthene	0	0	0	0	22.6667	193
	Benzo[k]fluoranthene	0	0	0	0	22.6667	193
	Beryllium	0	0	0	0	4.66667	4
	Beta-BHC	0	0	0	0	2	1.866667
	bis(2-Chloroisopropyl)ether	0	0	0	0	45.3667	9.666667
	Cadmium	1	3	1.9	13.33333	4.56667	13.33333
	Chromium	0	3	0	213.3333	100	213.3333
	Chrysene	0	0	0	0	22.6667	66.26667
	cis-Chlordane (alpha-Chlordane)	0	0	0	0	2	1.866667
	cis-Nonachlor	0	0	0	0	2	1.866667
	Cobalt	3	3	20	165.6667	20	165.6667
	Copper	3	3	614	1021.333	614	1021.333
	DDMU	0	0	0	0	2	1.866667
	Delta-BHC	0	0	0	0	2	1.866667
	Dibenz[a,h]anthracene	0	0	0	0	45.3667	193
	Dibenzofuran	0	0	0	0	22.6667	4.833333
	Endosulfan Sulfate	0	0	0	0	2	1.866667
	Fluoranthene	0	0	0	0	45.3667	69.83333
	Gamma-Chlordane	0	0	0	0	2	1.866667
	Gamma-Chlordene	0	0	0	0	2	1.866667
	Heptachlor	0	0	0	0	2	1.866667
	Heptachlor Epoxide	0	0	0	0	2	1.866667
	Hexachlorobenzene	0	0	0	0	2	1.866667

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Hexachlorobutadiene	0	0	0	0	22.6667	4.833333
	Hexachloroethane	0	0	0	0	22.6667	45.56667
	Indeno(1,2,3-cd)pyrene	0	0	0	0	45.3667	193
	Lead	1	3	3.66667	127	10.3333	127
	Lindane	0	0	0	0	2	1.866667
	Manganese	3	3	1746.67	7326.667	1746.67	7326.667
	Mercury	3	3	92	119.6667	92	119.6667
	Mirex	0	0	0	0	2	1.866667
	Naphthalene	0	0	0	0	24.3667	27.73333
	Naphthalene, 1-methyl-	0	0	0	0	22.6667	4.833333
	Naphthalene, 2-methyl-	0	2	0	5.866667	22.6667	7.466667
	Nickel	3	3	59.6667	70.66667	59.6667	70.66667
	Nitrobenzene	0	0	0	0	22.6667	4.833333
	n-Nitrosodiphenylamine	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	1	1	3.3E-06	0.000117	0.00012	0.000143
	OCDF	1	2	2.7E-05	5.33E-05	9.3E-05	6.67E-05
	Oxychlordane	0	0	0	0	2	1.866667
	PCB 105	3	3	0.44113	1.06314	0.44113	1.06314
	PCB 114	3	3	0.03392	0.071917	0.03392	0.071917
	PCB 118	3	3	1.00758	2.416667	1.00758	2.416667
	PCB 123	3	3	0.01659	0.03352	0.01659	0.03352
	PCB 126	3	3	0.00299	0.00757	0.00299	0.00757
	PCB 156	3	3	0.15906	0.39821	0.15906	0.39821
	PCB 157	3	3	0.03103	0.076903	0.03103	0.076903
	PCB 167	3	3	0.07469	0.172917	0.07469	0.172917
	PCB 169	0	0	0	0	0.00083	0.001
	PCB 170	3	3	0.25984	0.56537	0.25984	0.56537
	PCB 180	3	3	0.81401	1.806667	0.81401	1.806667
	PCB 189	3	3	0.01086	0.025993	0.01086	0.025993
	Pentachloroanisol	0	0	0	0	2	1.866667
	Pentachlorophenol	0	0	0	0	181.333	193
	Phenanthrene	0	0	0	0	22.6667	36.96667
	Phenol	0	0	0	0	181.333	193
	Pyrene	0	2	0	4	45.3667	7.2
	Retene	0	2	0	19.33333	45.3667	85.33333
	Selenium	3	3	213.333	256.6667	213.333	256.6667
	Silver	0	0	0	0	133.333	100
	Tetrachloroguaiacol	0	0	0	0	181.333	193
	Thallium	0	0	0	0	50	50
	Toxaphene	0	0	0	0	60.3333	56
	trans-Nonachlor	0	0	0	0	2	1.866667
	Vanadium	1	3	6	145	19.3333	145
	Zinc	3	3	20333.3	24366.67	20333.3	24366.67
	PCB 077	3	3	0.01675	0.039613	0.01675	0.039613
	Aroclor 1016	0	0	0	0	20	18.66667
	Aroclor 1221	0	0	0	0	20	18.66667

**Appendix E-6. Largescale sucker station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits					
		Detectn. Fr		DL=0		DL=DL	
		FS	WB	Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Aroclor 1232	0	0	0	0	20	18.66667
	Aroclor 1242	0	0	0	0	20	18.66667
	Aroclor 1248	0	0	0	0	20	18.66667
	Aroclor 1254	1	2	4.66667	34.33333	17.6667	41
	Aroclor 1260	0	0	0	0	20	18.66667
	DDD-o,p'	0	0	0	0	2	1.866667
	DDE-o,p'	0	0	0	0	2	1.866667
	DDT-o,p'	0	0	0	0	2	1.866667
	DDD-p,p'	0	3	0	2.133333	2	2.133333
	DDE-p,p'	3	3	20.3333	48.66667	20.3333	48.66667
	DDT-p,p'	1	2	0.83333	0.833333	2.13333	1.5

Appendix E-7. Mountain Whitefish station averages at full detection limits and with detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
Sta. 9	1,2,3,4,6,7,8-HpCDD	0.0001	0.000253	0.000103	0.000253
	1,2,3,4,6,7,8-HpCDF	0	0	2.33E-05	5.33E-05
	1,2,3,4,7,8,9-HpCDF	0	1.33E-05	2.33E-05	6.33E-05
	1,2,3,4,7,8-HxCDD	3.33E-05	0.00003	3.33E-05	0.00004
	1,2,3,4,7,8-HxCDF	3.67E-05	0.00003	3.67E-05	3.67E-05
	1,2,3,6,7,8-HxCDD	0.000123	3.67E-05	0.000123	5.67E-05
	1,2,3,6,7,8-HxCDF	1.67E-05	0.00002	0.00002	2.67E-05
	1,2,3,7,8,9-HxCDD	0.00004	3.67E-05	4.33E-05	0.00006
	1,2,3,7,8,9-HxCDF	6.67E-06	6.67E-06	1.33E-05	1.67E-05
	1,2,3,7,8-PeCDD	0.000173	0.00012	0.000173	0.000127
	1,2,3,7,8-PeCDF	0.00013	0.00016	0.00013	0.00016
	1,2,4-Trichlorobenzene	0	0	9.566667	9.4
	1,2-Diphenylhydrazine	0	0	9.566667	9.4
	2,3,4,6,7,8-HxCDF	0	4.67E-05	0.00001	4.67E-05
	2,3,4,6-Tetrachlorophenol	0	0	384.3333	376.3333
	2,3,4,7,8-PeCDF	0.000293	0.0003	0.000293	0.0003
	2,3,7,8-TCDD	0.000207	0.000173	0.000207	0.000173
	2,3,7,8-TCDF	0.013367	0.0106	0.013367	0.0106
	2,4,5-Trichlorophenol	0	0	384.3333	376.3333
	2,4,6-Trichlorophenol	0	0	384.3333	376.3333
	2,4-Dichlorophenol	0	0	384.3333	376.3333
	2,4-Dimethylphenol	0	0	960.3333	940.6667
	2,4-Dinitrotoluene	0	0	19.13333	18.8
	2,6-Dinitrotoluene	0	0	38.26667	37.6
	2-Chloronaphthalene	0	0	19.13333	18.8
	2-Chlorophenol	0	0	384.3333	376.3333
	3,4,5-Trichloroguaiacol	0	0	960.3333	940.6667
	3,4,6-Trichloroguaiacol	0	0	384.3333	376.3333
	3,4-Dichloroguaiacol	0	0	960.3333	940.6667
	4,5,6-Trichloroguaiacol	0	0	960.3333	940.6667
	4,5-Dichloroguaiacol	0	0	960.3333	940.6667
	4,6-Dichloroguaiacol	0	0	960.3333	940.6667
	4-Bromophenyl-Phenylether	0	0	9.566667	9.4
	4-Chloro-3-methylphenol	0	0	384.3333	376.3333
	4-Chloroguaiacol	0	0	960.3333	940.6667
	4-Chlorophenyl-Phenylether	0	0	9.566667	9.4
	9H-Fluorene	0	0	9.566667	9.4
	Acenaphthene	0	0	19.13333	19.93333
	Acenaphthylene	0	0	9.566667	9.4
	Aldrin	2	1.7	3.2	1.7
	Alpha-BHC	0	1.5	1.833333	1.5
	Alpha-Chlordene	0	0	1.833333	1.766667
	Aluminum	1170	15466.67	1503.333	15466.67
	Anthracene	0	0	9.566667	9.4
	Antimony	0	0	50	50
	Arsenic	130	140	130	140

Appendix E-7. Mountain Whitefish station averages at full detection limits and with detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Barium	330	669.3333	330	669.3333
	Benzene, 1,2-dichloro-	0	0	9.566667	9.4
	Benzene, 1,3-dichloro-	0	0	9.566667	9.4
	Benzene, 1,4-dichloro-	0	0	9.566667	9.4
	Benzo(a)anthracene	0	0	9.566667	9.4
	Benzo(a)pyrene	0	0	9.566667	9.4
	Benzo(g,h,i)perylene	0	0	19.13333	18.8
	Benzo[b]Fluoranthene	0	0	9.566667	9.4
	Benzo[k]fluoranthene	0	0	9.566667	9.4
	Beryllium	0	0	4	4
	Beta-BHC	0	0	1.833333	1.766667
	bis(2-Chloroisopropyl)ether	0	0	19.13333	18.8
	Cadmium	9.7	50.66667	9.7	50.66667
	Chromium	323.3333	153.3333	323.3333	153.3333
	Chrysene	0	0	9.566667	9.4
	cis-Chlordane (alpha-Chlordane)	0	0	1.833333	1.766667
	cis-Nonachlor	10.36667	14	10.36667	14
	Cobalt	57.66667	105	57.66667	105
	Copper	524.6667	663.3333	524.6667	663.3333
	DDMU	30.33333	29	30.33333	29
	Delta-BHC	0	0	1.833333	1.766667
	Dibenz[a,h]anthracene	0	0	19.13333	18.8
	Dibenzofuran	0	0	9.566667	9.4
	Endosulfan Sulfate	0	0	1.833333	1.766667
	Fluoranthene	0	0	19.13333	18.8
	Gamma-Chlordane	0	0	1.833333	1.766667
	gamma-Chlordene	0	0	1.833333	1.766667
	Heptachlor	0	0	1.833333	1.766667
	Heptachlor Epoxide	0	0	1.833333	1.766667
	Hexachlorobenzene	0	2.133333	1.833333	2.133333
	Hexachlorobutadiene	0	0	9.566667	9.4
	Hexachloroethane	0	0	9.566667	9.4
	Indeno(1,2,3-cd)pyrene	0	0	19.13333	18.8
	Lead	22.66667	59.33333	22.66667	59.33333
	Lindane	0	0	1.833333	1.766667
	Manganese	716.3333	3050	716.3333	3050
	Mercury	0	0	100	100
	Mirex	8.766667	5.066667	8.766667	5.066667
	Naphthalene	0	0	25.63333	24.93333
	Naphthalene, 1-methyl-	0	0	9.566667	9.4
	Naphthalene, 2-methyl-	0	0	9.566667	9.4
	Nickel	95.33333	80	95.33333	80
	Nitrobenzene	0	0	9.566667	9.4
	n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	0.000227	0.00033	0.000227	0.000333
	OCDF	0.00003	0.00008	3.33E-05	0.000123

Appendix E-7. Mountain Whitefish station averages at full detection limits and with detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Oxychlordan	0	0	1.833333	1.766667
	PCB 105	20.85667	5.75	20.85667	5.75
	PCB 114	1.577	0.581	1.577	0.581
	PCB 118	48.56667	10.61333	48.56667	10.61333
	PCB 123	0.720333	0.214667	0.720333	0.214667
	PCB 126	0.056333	0.012827	0.056333	0.012827
	PCB 156	7.426667	2.416667	7.426667	2.416667
	PCB 157	1.441333	0.455	1.441333	0.455
	PCB 167	2.010333	0.621333	2.010333	0.621333
	PCB 169	0	0	0.009783	0.00514
	PCB 170	6.18	3.17	6.18	3.17
	PCB 180	14.06667	7.603333	14.06667	7.603333
	PCB 189	0.24	0.112433	0.24	0.112433
	Pentachloroanisol	0	0.533333	1.833333	1.7
	Pentachlorophenol	0	0	384.3333	376.3333
	Phenanthrene	0	0	9.566667	9.4
	Phenol	0	0	384.3333	376.3333
	Pyrene	0	0	19.13333	18.8
	Retene	0	0	19.13333	18.8
	Selenium	470	1060	470	1060
	Silver	0	0	100	100
	Tetrachloroguaiacol	0	0	384.3333	376.3333
	Thallium	0	0	50	50
	Toxaphene	0	0	55.66667	53.33333
	trans-Nonachlor	1.8	3.733333	2.366667	3.733333
	Vanadium	14	75.66667	17.33333	75.66667
	Zinc	13866.67	24700	13866.67	24700
	Aroclor 1016	0	0	18.33333	17.66667
	Aroclor 1221	0	0	18.33333	17.66667
	Aroclor 1232	0	0	18.33333	17.66667
	Aroclor 1242	18.66667	23.66667	18.66667	23.66667
	Aroclor 1248	0	0	18.33333	17.66667
	Aroclor 1254	360	130	360	130
	Aroclor 1260	116.3333	71.33333	116.3333	71.33333
	PCB 077	0.515667	0.292	0.515667	0.292
	DDD-o,p'	10.63333	17.33333	10.63333	17.33333
	DDE-o,p'	26.66667	16.33333	26.66667	16.33333
	DDT-o,p'	0	0	1.833333	1.766667
	DDD-p,p'	83.33333	99	83.33333	99
	DDE-p,p'	653.3333	636.6667	653.3333	636.6667
	DDT-p,p'	9.333333	4.2	9.333333	4.2
Sta. 48	1,2,3,4,6,7,8-HpCDD	0.000273	0.000327	0.000273	0.000327
	1,2,3,4,6,7,8-HpCDF	0	0	6.33E-05	0.00005
	1,2,3,4,7,8,9-HpCDF	0	0	6.33E-05	0.00005
	1,2,3,4,7,8-HxCDD	0.00002	4.33E-05	5.33E-05	4.67E-05
	1,2,3,4,7,8-HxCDF	0.00001	0.00003	3.67E-05	3.33E-05

Appendix E-7. Mountain Whitefish station averages at full detection limits and with detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	1,2,3,6,7,8-HxCDD	0.000167	0.000163	0.000167	0.000173
	1,2,3,6,7,8-HxCDF	6.67E-06	3.33E-05	3.33E-05	3.67E-05
	1,2,3,7,8,9-HxCDD	0	0.00005	3.67E-05	5.33E-05
	1,2,3,7,8,9-HxCDF	0	0	3.33E-05	0.00002
	1,2,3,7,8-PeCDD	0.00015	0.000157	0.000157	0.000167
	1,2,3,7,8-PeCDF	7.67E-05	0.000127	9.67E-05	0.000127
	1,2,4-Trichlorobenzene	0	0	9	9.166667
	1,2-Diphenylhydrazine	0	0	9	9.166667
	2,3,4,6,7,8-HxCDF	1.33E-05	3.67E-05	0.00004	3.67E-05
	2,3,4,6-Tetrachlorophenol	0	0	360.3333	367.3333
	2,3,4,7,8-PeCDF	0.000137	0.000297	0.000143	0.000297
	2,3,7,8-TCDD	0.000103	0.000187	0.00012	0.000187
	2,3,7,8-TCDF	0.003817	0.005607	0.003817	0.005607
	2,4,5-Trichlorophenol	0	0	360.3333	367.3333
	2,4,6-Trichlorophenol	0	0	360.3333	367.3333
	2,4-Dichlorophenol	0	0	360.3333	367.3333
	2,4-Dimethylphenol	0	0	901	918
	2,4-Dinitrotoluene	0	0	18.03333	18.36667
	2,6-Dinitrotoluene	0	0	36.03333	36.73333
	2-Chloronaphthalene	0	0	18.03333	18.36667
	2-Chlorophenol	0	0	360.3333	367.3333
	3,4,5-Trichloroguaiacol	0	0	901	918
	3,4,6-Trichloroguaiacol	0	0	360.3333	367.3333
	3,4-Dichloroguaiacol	0	0	901	918
	4,5,6-Trichloroguaiacol	0	0	901	918
	4,5-Dichloroguaiacol	0	0	901	918
	4,6-Dichloroguaiacol	0	0	901	918
	4-Bromophenyl-Phenylether	0	0	9	9.166667
	4-Chloro-3-methylphenol	0	0	360.3333	367.3333
	4-Chloroguaiacol	0	0	901	918
	4-Chlorophenyl-Phenylether	0	0	9	9.166667
	9H-Fluorene	0	0	9	10.23333
	Acenaphthene	0	10.46667	18.03333	24.4
	Acenaphthylene	0	0	9	9.166667
	Aldrin	0	0	1.866667	1.866667
	Alpha-BHC	0	0	1.866667	1.866667
	Alpha-Chlordene	0	0	1.866667	1.866667
	Aluminum	630.3333	4066.667	963.6667	4066.667
	Anthracene	0	0	9	9.166667
	Antimony	0	0	50	50
	Arsenic	113.3333	126.6667	113.3333	126.6667
	Barium	310	644	310	644
	Benzene, 1,2-dichloro-	0	0	9	9.166667
	Benzene, 1,3-dichloro-	0	0	9	9.166667
	Benzene, 1,4-dichloro-	0	0	9	9.166667
	Benzo(a)anthracene	0	0	9	9.166667

Appendix E-7. Mountain Whitefish station averages at full detection limits and with detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Benzo(a)pyrene	0	0	9	9.166667
	Benzo(g,h,i)perylene	0	0	18.03333	18.36667
	Benzo[b]Fluoranthene	0	0	9	9.166667
	Benzo[k]fluoranthene	0	0	9	9.166667
	Beryllium	0	0	4	4
	Beta-BHC	0	0	1.866667	1.866667
	bis(2-Chloroisopropyl)ether	0	0	18.03333	18.36667
	Cadmium	12.33333	50	12.33333	50
	Chromium	0	106.6667	100	140
	Chrysene	0	0	9	9.166667
	cis-Chlordane (alpha-Chlordane)	0	0	1.866667	1.866667
	cis-Nonachlor	11.2	8.2	11.2	8.2
	Cobalt	88.33333	176.3333	88.33333	176.3333
	Copper	639.3333	689.3333	639.3333	689.3333
	DDMU	23	24.33333	23	24.33333
	Delta-BHC	0	0	1.866667	1.866667
	Dibenz[a,h]anthracene	0	0	18.03333	18.36667
	Dibenzofuran	0	0	9	9.166667
	Endosulfan Sulfate	0	0	1.866667	1.866667
	Fluoranthene	0	0	18.03333	18.36667
	Gamma-Chlordane	0	0	1.866667	1.866667
	gamma-Chlordene	0	0	1.866667	1.866667
	Heptachlor	0	0	1.866667	1.866667
	Heptachlor Epoxide	0	0	1.866667	1.866667
	Hexachlorobenzene	1.113333	1.046667	1.113333	1.046667
	Hexachlorobutadiene	0	0	9	9.166667
	Hexachloroethane	0	0	9	9.166667
	Indeno(1,2,3-cd)pyrene	0	0	18.03333	18.36667
	Lead	18.33333	38	18.33333	38
	Lindane	0	0	1.866667	1.866667
	Manganese	1243.333	3946.667	1243.333	3946.667
	Mercury	129.3333	75.33333	129.3333	108.6667
	Mirex	0	0	1.866667	1.866667
	Naphthalene	0	0	11.23333	10.93333
	Naphthalene, 1-methyl-	0	0	9	9.166667
	Naphthalene, 2-methyl-	0	0	9	9.366667
	Nickel	13.33333	100.3333	33.33333	100.3333
	Nitrobenzene	0	0	9	9.166667
	n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	0.000643	0.00036	0.000673	0.000363
	OCDF	1.67E-05	0	0.00007	0.00001
	Oxychlordane	0	0	1.866667	1.866667
	PCB 105	3	3.453333	3	3.453333
	PCB 114	0.231667	0.292667	0.231667	0.292667
	PCB 118	6.4	6.993333	6.4	6.993333
	PCB 123	0.096767	0.116667	0.096767	0.116667

Appendix E-7. Mountain Whitefish station averages at full detection limits and with detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	PCB 126	0.0053	0.009167	0.009167	0.01209
	PCB 156	1.47	1.476667	1.47	1.476667
	PCB 157	0.277	0.273	0.277	0.273
	PCB 167	0.64	0.660333	0.64	0.660333
	PCB 169	0	0	0.003237	0.003097
	PCB 170	3.136667	2.996667	3.136667	2.996667
	PCB 180	11.48	10.99	11.48	10.99
	PCB 189	0.142667	0.1726	0.142667	0.1726
	Pentachloroanisol	1.133333	1.266667	1.733333	1.866667
	Pentachlorophenol	0	0	360.3333	367.3333
	Phenanthrene	0	0	9	9.166667
	Phenol	0	0	360.3333	367.3333
	Pyrene	0	0	18.03333	18.36667
	Retene	0	0	18.03333	18.36667
	Selenium	691.3333	996.6667	691.3333	996.6667
	Silver	0	0	100	100
	Tetrachloroguaiacol	0	0	360.3333	367.3333
	Thallium	0	0	50	50
	Toxaphene	0	0	56	55.66667
	trans-Nonachlor	5.566667	4.2	5.566667	4.2
	Vanadium	21.33333	122.6667	28	122.6667
	Zinc	13466.67	25666.67	13466.67	25666.67
	Aroclor 1016	0	0	18.66667	18.66667
	Aroclor 1221	0	0	18.66667	18.66667
	Aroclor 1232	0	0	18.66667	18.66667
	Aroclor 1242	0	0	18.66667	18.66667
	Aroclor 1248	0	0	18.66667	18.66667
	Aroclor 1254	52.66667	39.33333	52.66667	39.33333
	Aroclor 1260	139.3333	107.3333	139.3333	107.3333
	PCB 077	0.127	0.159667	0.127	0.159667
	DDD-o,p'	4.966667	5.666667	4.966667	5.666667
	DDE-o,p'	9.366667	5.866667	9.366667	6.5
	DDT-o,p'	0	0	1.866667	1.866667
	DDD-p,p'	45.66667	53.66667	45.66667	53.66667
	DDE-p,p'	756.6667	663.3333	756.6667	663.3333
	DDT-p,p'	49.66667	41	49.66667	41
Sta. 98	1,2,3,4,6,7,8-HpCDD	0.000262	0.00039	0.000262	0.00039
	1,2,3,4,6,7,8-HpCDF	0.00009	6.67E-05	0.00009	8.67E-05
	1,2,3,4,7,8,9-HpCDF	0.00004	6.67E-06	0.00004	5.33E-05
	1,2,3,4,7,8-HxCDD	8.67E-05	0.000133	0.00009	0.000133
	1,2,3,4,7,8-HxCDF	0.00004	1.33E-05	0.00004	6.33E-05
	1,2,3,6,7,8-HxCDD	0.00017	0.000237	0.00017	0.000237
	1,2,3,6,7,8-HxCDF	0.00005	1.33E-05	0.00005	6.33E-05
	1,2,3,7,8,9-HxCDD	8.67E-05	5.67E-05	8.67E-05	0.00008
	1,2,3,7,8,9-HxCDF	0.000112	0.00011	0.000112	0.00011
	1,2,3,7,8-PeCDD	0.00018	0.000147	0.00018	0.000157

Appendix E-7. Mountain Whitefish station averages at full detection limits and with detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	1,2,3,7,8-PeCDF	0.00008	0.00005	0.00008	6.33E-05
	1,2,4-Trichlorobenzene	0	0	23.15	4.533333
	1,2-Diphenylhydrazine	0	0	23.15	4.533333
	2,3,4,6,7,8-HxCDF	0.00015	0.000157	0.00015	0.000157
	2,3,4,6-Tetrachlorophenol	0		185	
	2,3,4,7,8-PeCDF	8.33E-05	9.67E-05	8.33E-05	9.67E-05
	2,3,7,8-TCDD	0.00006	0.00005	0.00006	6.67E-05
	2,3,7,8-TCDF	0.000617	0.00108	0.000617	0.00108
	2,4,5-Trichlorophenol	0		185	
	2,4,6-Trichlorophenol	0	0	184.6667	181.3333
	2,4-Dichlorophenol	0	0	184.6667	181.3333
	2,4-Dimethylphenol	0	0	461.6667	453.3333
	2,4-Dinitrotoluene	0	0	46.23333	9.066667
	2,6-Dinitrotoluene	0	0	92.5	18.13333
	2-Chloronaphthalene	0	0	30.85	4.533333
	2-Chlorophenol	0	0	184.6667	181.3333
	3,4,5-Trichloroguaiacol	0	0	461.6667	453.3333
	3,4,6-Trichloroguaiacol	0	0	184.6667	181.3333
	3,4-Dichloroguaiacol	0	0	461.6667	453.3333
	4,5,6-Trichloroguaiacol	0	0	461.6667	453.3333
	4,5-Dichloroguaiacol	0	0	461.6667	453.3333
	4,6-Dichloroguaiacol	0	0	461.6667	453.3333
	4-Bromophenyl-Phenylether	0	0	23.15	4.533333
	4-Chloro-3-methylphenol	0	0	184.6667	181.3333
	4-Chloroguaiacol	0	0	461.6667	453.3333
	4-Chlorophenyl-Phenylether	0	0	23.15	4.533333
	9H-Fluorene	0	0	23.15	4.533333
	Acenaphthene	0	0	46.23333	9.066667
	Acenaphthylene	0	0	23.15	4.533333
	Aldrin	0	0	1.766667	1.9
	Alpha-BHC	0	0	1.766667	1.9
	Alpha-Chlordene	0	0	1.766667	1.9
	Aluminum	0	10213.33	12500	16880
	Anthracene	0	0	23.15	4.533333
	Antimony	0	0	50	50
	Arsenic	63.66667	136.6667	63.66667	136.6667
	Barium	173.3333	735.3333	273.3333	735.3333
	Benzene, 1,2-dichloro-	0	0	23.15	4.566667
	Benzene, 1,3-dichloro-	0	0	23.15	4.533333
	Benzene, 1,4-dichloro-	0	0	23.15	4.533333
	Benzo(a)anthracene	0	0	23.15	4.533333
	Benzo(a)pyrene	0	0	23.15	90.76667
	Benzo(g,h,i)perylene	0	0	46.23333	181.3333
	Benzo[b]Fluoranthene	0	0	38.53333	181.3333
	Benzo[k]fluoranthene	0	0	38.53333	181.3333
	Beryllium	0	0	4	4

Appendix E-7. Mountain Whitefish station averages at full detection limits and with detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Beta-BHC	0	0	1.766667	1.9
	bis(2-Chloroisopropyl)ether	0	0	46.23333	9.066667
	Cadmium	0	5.466667	4	5.466667
	Chromium	0	70	100	103.3333
	Chrysene	0	0	23.15	4.533333
	cis-Chlordane (alpha-Chlordane)	0	0	1.766667	1.9
	cis-Nonachlor	0	0	1.766667	1.9
	Cobalt	34.16667	94.66667	34.16667	94.66667
	Copper	567.1667	2460	567.1667	2460
	DDMU	0	0	1.766667	1.9
	Delta-BHC	0	0	1.766667	1.9
	Dibenz[a,h]anthracene	0	0	46.23333	181.3333
	Dibenzofuran	0	0	23.15	4.533333
	Endosulfan Sulfate	0	0	1.766667	1.9
	Fluoranthene	0	0	46.23333	9.066667
	Gamma-Chlordane	0	0	1.766667	1.9
	gamma-Chlordene	0	0	1.766667	1.9
	Heptachlor	0	0	1.766667	1.9
	Heptachlor Epoxide	0	0	1.766667	1.9
	Hexachlorobenzene	24	0	25.2	1.9
	Hexachlorobutadiene	0	0	23.15	4.533333
	Hexachloroethane	0	0	23.15	4.533333
	Indeno(1,2,3-cd)pyrene	0	0	46.23333	181.3333
	Lead	14.16667	26.66667	14.16667	26.66667
	Lindane	0	0	1.766667	1.9
	Manganese	759	4333.333	759	4333.333
	Mercury	80.16667	73.66667	80.16667	73.66667
	Mirex	0	0	1.766667	1.9
	Naphthalene	0	0	23.15	27.53333
	Naphthalene, 1-methyl-	0	0	23.15	4.533333
	Naphthalene, 2-methyl-	0	7.833333	23.15	7.833333
	Nickel	55.83333	615	55.83333	615
	Nitrobenzene	0	0	23.15	4.533333
	n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	0.000395	0.000493	0.000395	0.000493
	OCDF	6.67E-05	1.33E-05	6.67E-05	6.67E-05
	Oxychlordane	0	0	1.766667	1.9
	PCB 105	1.048215	1.386667	1.048215	1.386667
	PCB 114	0.079927	0.10336	0.079927	0.10336
	PCB 118	2.258333	2.015787	2.258333	2.015787
	PCB 123	0.025805	0.03425	0.025805	0.03425
	PCB 126	0.005957	0.008217	0.005957	0.008217
	PCB 156	0.369755	0.413833	0.369755	0.413833
	PCB 157	0.067313	0.077587	0.067313	0.077587
	PCB 167	0.128352	0.15439	0.128352	0.15439
	PCB 169	0	0	0.001533	0.001537

Appendix E-7. Mountain Whitefish station averages at full detection limits and with detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	PCB 170	0.30854	0.332313	0.30854	0.332313
	PCB 180	0.801577	0.859247	0.801577	0.859247
	PCB 189	0.014498	0.015653	0.014498	0.015653
	Pentachloroanisol	0	0	1.766667	1.9
	Pentachlorophenol	0	0	184.6667	181.3333
	Phenanthrene	0	0	23.15	5.066667
	Phenol	0	0	184.6667	181.3333
	Pyrene	0	0	46.23333	9.066667
	Retene	0	6.666667	46.23333	12.66667
	Selenium	335	626.6667	335	626.6667
	Silver	0	0	100	100
	Tetrachloroguaiacol	0	0	184.6667	181.3333
	Thallium	0	0	50	50
	Toxaphene	0	0	52.33333	57.33333
	trans-Nonachlor	0	0	1.766667	1.9
	Vanadium	45	253.3333	45	253.3333
	Zinc	17800	35133.33	17800	35133.33
	Aroclor 1016	0	0	17.66667	19
	Aroclor 1221	0	0	17.66667	19
	Aroclor 1232	0	0	17.66667	19
	Aroclor 1242	0	0	17.66667	19
	Aroclor 1248	0	0	17.66667	19
	Aroclor 1254	26.66667	42.33333	26.66667	42.33333
	Aroclor 1260	0	0	17.66667	19
	PCB 077	0.018555	0.037947	0.018555	0.037947
	DDD-o,p'	0	0	1.766667	1.9
	DDE-o,p'	0	0	1.766667	1.9
	DDT-o,p'	0	0	1.766667	1.9
	DDD-p,p'	0	0	1.766667	1.9
	DDE-p,p'	8.7	15.33333	8.7	15.33333
	DDT-p,p'	0	0	1.766667	1.9
Sta. 101	1,2,3,4,6,7,8-HpCDD	0.000227	0.000283	0.000227	0.000283
	1,2,3,4,6,7,8-HpCDF	5.33E-05	8.67E-05	5.67E-05	8.67E-05
	1,2,3,4,7,8,9-HpCDF	0	6.67E-06	0.00001	1.33E-05
	1,2,3,4,7,8-HxCDD	0.0001	0.000113	0.0001	0.000113
	1,2,3,4,7,8-HxCDF	6.67E-06	0.00003	1.33E-05	0.00003
	1,2,3,6,7,8-HxCDD	0.00011	0.000167	0.00011	0.000167
	1,2,3,6,7,8-HxCDF	3.33E-05	3.67E-05	3.33E-05	3.67E-05
	1,2,3,7,8,9-HxCDD	3.67E-05	5.33E-05	3.67E-05	5.33E-05
	1,2,3,7,8,9-HxCDF	0.00006	0.00002	0.00006	2.67E-05
	1,2,3,7,8-PeCDD	0.000153	0.000197	0.000153	0.000197
	1,2,3,7,8-PeCDF	4.67E-05	0.00006	4.67E-05	0.00006
	1,2,4-Trichlorobenzene	0	0	12.76667	5.366667
	1,2-Diphenylhydrazine	0	0	12.76667	5.366667
	2,3,4,6,7,8-HxCDF	0.000133	0.000137	0.000133	0.000137
	2,3,4,7,8-PeCDF	3.33E-05	7.67E-05	3.67E-05	7.67E-05

Appendix E-7. Mountain Whitefish station averages at full detection limits and with detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	2,3,7,8-TCDD	0.00004	6.33E-05	4.33E-05	6.67E-05
	2,3,7,8-TCDF	0.000157	0.000293	0.000157	0.000293
	2,4,6-Trichlorophenol	0	0	512.3333	215
	2,4-Dichlorophenol	0	0	512.3333	215
	2,4-Dimethylphenol	0	0	1280.833	537.5
	2,4-Dinitrotoluene	0	0	25.6	10.73333
	2,6-Dinitrotoluene	0	8.533333	51.23333	23.5
	2-Chloronaphthalene	0	0	25.6	10.73333
	2-Chlorophenol	0	0	512.3333	215
	3,4,5-Trichloroguaiacol	0	0	1280.833	537.5
	3,4,6-Trichloroguaiacol	0	0	512.3333	215
	3,4-Dichloroguaiacol	0	0	1280.833	537.5
	4,5,6-Trichloroguaiacol	0	0	1280.833	537.5
	4,5-Dichloroguaiacol	0	0	1280.833	537.5
	4,6-Dichloroguaiacol	0	0	1280.833	537.5
	4-Bromophenyl-Phenylether	0	0	12.76667	5.366667
	4-Chloro-3-methylphenol	0	0	512.3333	215
	4-Chloroguaiacol	0	0	1280.833	537.5
	4-Chlorophenyl-Phenylether	0	0	12.76667	5.366667
	9H-Fluorene	0	0	12.76667	5.366667
	Acenaphthene	0	0	25.6	10.73333
	Acenaphthylene	0	0	12.76667	5.366667
	Aldrin	0	0	2.3	2.8
	Alpha-BHC	0	0	2.3	2.8
	Alpha-Chlordene	0	0	2.3	2.8
	Aluminum	2040	11293.33	2040	11293.33
	Anthracene	0	0	12.76667	5.366667
	Antimony	0	0	50	50
	Arsenic	101	156.6667	101	156.6667
	Barium	266.6667	771	266.6667	771
	Benzene, 1,2-dichloro-	0	0	12.76667	5.366667
	Benzene, 1,3-dichloro-	0	0	12.76667	5.366667
	Benzene, 1,4-dichloro-	0	0	12.76667	5.366667
	Benzo(a)anthracene	0	0	12.76667	5.366667
	Benzo(a)pyrene	0	0	12.76667	5.366667
	Benzo(g,h,i)perylene	0	0	25.6	10.73333
	Benzo[b]Fluoranthene	0	0	12.76667	5.366667
	Benzo[k]fluoranthene	0	0	12.76667	5.366667
	Beryllium	0	0	4	4
	Beta-BHC	0	0	2.3	2.8
	bis(2-Chloroisopropyl)ether	0	0	25.6	10.73333
	Cadmium	0	5.633333	4	6.966667
	Chromium	76.66667	113.3333	110	113.3333
	Chrysene	0	0	12.76667	5.366667
	cis-Chlordane (alpha-Chlordane)	0	0	2.3	2.8
	cis-Nonachlor	0	0	2.3	2.8

Appendix E-7. Mountain Whitefish station averages at full detection limits and with detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Cobalt	25.66667	55.33333	25.66667	55.33333
	Copper	763.6667	988.6667	763.6667	988.6667
	DDMU	0	0	2.3	2.8
	Delta-BHC	0	0	2.3	2.8
	Dibenz[a,h]anthracene	0	0	25.6	10.73333
	Dibenzofuran	0	0	12.76667	5.366667
	Endosulfan Sulfate	0	0	2.3	2.8
	Fluoranthene	0	0	25.6	10.73333
	Gamma-Chlordane	0	0	2.3	2.8
	gamma-Chlordene	0	0	2.3	2.8
	Heptachlor	0	0	2.3	2.8
	Heptachlor Epoxide	0	0	2.3	2.8
	Hexachlorobenzene	0	0	2.3	2.8
	Hexachlorobutadiene	0	0	12.76667	5.366667
	Hexachloroethane	0	0	12.76667	5.366667
	Indeno(1,2,3-cd)pyrene	0	0	25.6	10.73333
	Lead	0	14.33333	10	14.33333
	Lindane	0	0	2.3	2.8
	Manganese	650.6667	2443.333	650.6667	2443.333
	Mercury	60.33333	51.66667	60.33333	51.66667
	Mirex	0	0	2.3	2.8
	Naphthalene	0	0	14.86667	13.73333
	Naphthalene, 1-methyl-	0	0	12.76667	5.366667
	Naphthalene, 2-methyl-	0	0	12.76667	5.366667
	Nickel	130.3333	304.6667	130.3333	304.6667
	Nitrobenzene	0	0	12.76667	5.366667
	n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	0.00024	0.000297	0.00024	0.000297
	OCDF	1.33E-05	0.00002	1.67E-05	2.33E-05
	Oxychlordane	0	0	2.3	2.8
	PCB 105	0.291667	0.563667	0.291667	0.563667
	PCB 114	0.0237	0.056833	0.0237	0.056833
	PCB 118	0.513333	1.016333	0.513333	1.016333
	PCB 123	0.01302	0.028163	0.01302	0.028163
	PCB 126	0	0	0.00064	0.001397
	PCB 156	0.097267	0.202333	0.097267	0.202333
	PCB 157	0.0217	0	0.022317	0.001253
	PCB 167	0.042033	0.086367	0.042033	0.086367
	PCB 169	0.00146	0.00033	0.00183	0.001427
	PCB 170	0.385667	0.673	0.385667	0.673
	PCB 180	1.154333	2.026667	1.154333	2.026667
	PCB 189	0.010783	0.022333	0.010783	0.022333
	Pentachloroanisol	0	0	2.3	2.8
	Pentachlorophenol	0	0	512.3333	215
	Phenanthrene	0	0	12.76667	5.366667
	Phenol	0	0	512.3333	215

Appendix E-7. Mountain Whitefish station averages at full detection limits and with detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Pyrene	0	0	25.6	10.73333
	Retene	0	0	25.6	10.73333
	Selenium	524	1167	524	1167
	Silver	0	0	100	100
	Tetrachloroguaiacol	0	0	512.3333	215
	Thallium	0	0	50	50
	Toxaphene	0	0	69.33333	83.33333
	trans-Nonachlor	0	0	2.3	2.8
	Vanadium	30	185.3333	30	185.3333
	Zinc	15300	24366.67	15300	24366.67
	Aroclor 1016	0	0	17.66667	22.33333
	Aroclor 1221	0	0	17.66667	22.33333
	Aroclor 1232	0	0	17.66667	22.33333
	Aroclor 1242	0	0	17.66667	22.33333
	Aroclor 1248	0	0	17.66667	22.33333
	Aroclor 1254	0	0	17.66667	22.33333
	Aroclor 1260	10.16667	27.33333	16.5	27.33333
	PCB 077	0.030967	0.062067	0.030967	0.062067
	DDD-o,p'	0	0	2.3	2.8
	DDE-o,p'	0.966667	0.9	2.533333	2.833333
	DDT-o,p'	0	0	2.3	2.8
	DDD-p,p'	0	0	2.3	2.8
	DDE-p,p'	22.33333	42.66667	22.33333	42.66667
	DDT-p,p'	2.7	5.533333	2.7	5.533333

**Appendix E-8. Pacific Lamprey station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
21	1,2,3,4,6,7,8-HpCDD	0.000177	0.000232	0.00021	0.000232
	1,2,3,4,6,7,8-HpCDF	0	0.00003	3.33E-05	5.17E-05
	1,2,3,4,7,8,9-HpCDF	0	0.000005	3.33E-05	2.67E-05
	1,2,3,4,7,8-HxCDD	0.00007	6.33E-05	8.33E-05	0.00007
	1,2,3,4,7,8-HxCDF	0.00008	8.17E-05	8.33E-05	8.33E-05
	1,2,3,6,7,8-HxCDD	0.00018	0.000113	0.00018	0.000122
	1,2,3,6,7,8-HxCDF	8.67E-05	7.17E-05	8.67E-05	7.67E-05
	1,2,3,7,8,9-HxCDD	0.00004	0.000035	5.33E-05	4.17E-05
	1,2,3,7,8,9-HxCDF	3.67E-05	0.00004	0.00005	4.83E-05
	1,2,3,7,8-PeCDD	0.0001	0.000107	0.000113	0.000112
	1,2,3,7,8-PeCDF	0.000107	0.000258	0.000127	0.000258
	1,2,4-Trichlorobenzene	0	0	24.6	14.83333
	1,2-Diphenylhydrazine	0	0	24.6	14.83333
	2,3,4,6,7,8-HxCDF	0.00016	9.17E-05	0.00016	0.000102
	2,3,4,6-Tetrachlorophenol	0	0	984.3333	730.6667
	2,3,4,7,8-PeCDF	0.000113	0.00008	0.000113	9.33E-05
	2,3,7,8-TCDD	0.00002	0.00002	3.33E-05	0.000035
	2,3,7,8-TCDF	0.001413	0.001487	0.001413	0.001487
	2,4,5-Trichlorophenol	0	0	984.3333	730.6667
	2,4,6-Trichlorophenol	0	0	984.3333	593.1667
	2,4-Dichlorophenol	0	0	984.3333	593.1667
	2,4-Dimethylphenol	0	0	2463.333	1482.917
	2,4-Dinitrotoluene	0	0	49.23333	29.66667
	2,6-Dinitrotoluene	0	0	98.43333	59.31667
	2-Chloronaphthalene	0	0	49.23333	29.66667
	2-Chlorophenol	0	0	984.3333	593.1667
	3,4,5-Trichloroguaiacol	0	0	2463.333	1482.917
	3,4,6-Trichloroguaiacol	0	0	984.3333	593.1667
	3,4-Dichloroguaiacol	0	0	2463.333	1482.917
	4,5,6-Trichloroguaiacol	0	0	2463.333	1482.917
	4,5-Dichloroguaiacol	0	0	2463.333	1482.917
	4,6-Dichloroguaiacol	0	0	2463.333	1482.917
	4-Bromophenyl-Phenylether	0	0	24.6	14.83333
	4-Chloro-3-methylphenol	0	0	984.3333	593.1667
	4-Chloroguaiacol	0	0	2463.333	1482.917
	4-Chlorophenyl-Phenylether	0	0	24.6	14.83333
	9H-Fluorene	0	0	24.6	14.83333
	Acenaphthene	0	0	49.23333	29.66667
	Acenaphthylene	0	0	24.6	14.83333
	Aldrin	0	0	1.933333	2.566667
	Alpha-BHC	0	0	1.933333	2.566667
	Alpha-Chlordene	0	0	1.933333	2.566667
	Aluminum	0	1018.333	1000	1518.333
	Anthracene	0	0	24.6	14.83333
	Antimony	0	0	50	50
	Arsenic	313.3333	311.6667	313.3333	311.6667

**Appendix E-8. Pacific Lamprey station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Barium	0	0	200	200
	Benzene, 1,2-dichloro-	0	0	24.6	14.83333
	Benzene, 1,3-dichloro-	0	0	24.6	14.83333
	Benzene, 1,4-dichloro-	0	0	24.6	14.83333
	Benzo(a)anthracene	0	0	24.6	14.83333
	Benzo(a)pyrene	0	0	24.6	14.83333
	Benzo(g,h,i)perylene	0	0	49.23333	29.66667
	Benzo[b]Fluoranthene	0	0	24.6	14.83333
	Benzo[k]fluoranthene	0	0	24.6	14.83333
	Beryllium	0	0	4	4
	Beta-BHC	0	0	1.933333	2.566667
	bis(2-Chloroisopropyl)ether	0	0	49.23333	29.66667
	Cadmium	23.66667	136.1667	23.66667	136.1667
	Chromium	46.66667	65	113.3333	131.6667
	Chrysene	0	0	24.6	14.83333
	cis-Chlordane (alpha-Chlordane)	9.166667	3.85	9.166667	5.433333
	cis-Nonachlor	9.733333	3.983333	9.733333	5.566667
	Cobalt	33	105.8333	33	105.8333
	Copper	1200	4283.333	1200	4283.333
	DDMU	4.533333	1.983333	4.533333	3.566667
	Delta-BHC	0	0	1.933333	2.566667
	Dibenz[a,h]anthracene	0	0	49.23333	29.66667
	Dibenzofuran	0	0	24.6	14.83333
	Endosulfan Sulfate	#DIV/0!	0	#DIV/0!	3.166667
	Fluoranthene	0	0	49.23333	29.66667
	Gamma-Chlordane	1.266667	0.25	1.933333	2.5
	Gamma-Chlordene	0	0	1.933333	2.566667
	Heptachlor	0	0	1.933333	2.566667
	Heptachlor Epoxide	0	0	1.933333	2.566667
	Hexachlorobenzene	7.6	3.466667	7.6	5.05
	Hexachlorobutadiene	0	0	24.6	14.83333
	Hexachloroethane	0	0	24.6	14.83333
	Indeno(1,2,3-cd)pyrene	0	0	49.23333	29.66667
	Lead	0	0	10	10
	Lindane	0	0	1.933333	2.566667
	Manganese	379.6667	455.8333	379.6667	455.8333
	Mercury	0	68.66667	107	103.6667
	Mirex	0	0	1.933333	2.566667
	Naphthalene	0	0	65.76667	39.36667
	Naphthalene, 1-methyl-	0	10.93333	25.06667	19.23333
	Naphthalene, 2-methyl-	25.53333	24.31667	58.86667	38.36667
	Nickel	0	5.166667	30	30.16667
	Nitrobenzene	0	0	24.6	14.83333
	n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	0.00037	0.00029	0.00037	0.000293
	OCDF	0	1.33E-05	5.33E-05	4.17E-05

**Appendix E-8. Pacific Lamprey station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Oxychlorthane	0	0	1.933333	2.566667
	PCB 105	1.226667	0.924167	1.226667	0.924167
	PCB 114	0.137333	0.124833	0.137333	0.124833
	PCB 118	3.626667	2.75	3.626667	2.75
	PCB 123	0.0583	0.039833	0.0583	0.039833
	PCB 126	0.0156	0.020333	0.0156	0.020333
	PCB 156	0.274333	0.269667	0.274333	0.269667
	PCB 157	0.050633	0.020417	0.050633	0.021758
	PCB 167	0.167667	0.164167	0.167667	0.164167
	PCB 169	0	0	0.001	0.003437
	PCB 170	0.457667	0.325833	0.457667	0.325833
	PCB 180	1.61	1.1915	1.61	1.1915
	PCB 189	0.019833	0.018267	0.019833	0.018267
	Pentachloroanisol	1.6	0.616667	1.6	2.2
	Pentachlorophenol	0	0	984.3333	593.1667
	Phenanthrene	0	4.45	24.6	15.95
	Phenol	0	0	984.3333	593.1667
	Pyrene	0	0	49.23333	29.66667
	Retene	0	0	49.23333	29.66667
	Selenium	430	600.6667	430	600.6667
	Silver	0	0	100	100
	Tetrachloroguaiacol	0	0	984.3333	593.1667
	Thallium	0	0	50	50
	Toxaphene	0	0	58	72.4
	trans-Nonachlor	22.33333	9	22.33333	10.58333
	Vanadium	8	39	11.33333	39
	Zinc	20233.33	21433.33	20233.33	21433.33
	Aroclor 1016	0	0	19.33333	22.5
	Aroclor 1221	0	0	19.33333	22.5
	Aroclor 1232	0	0	19.33333	22.5
	Aroclor 1242	0	0	19.33333	22.5
	Aroclor 1248	0	0	19.33333	22.5
	Aroclor 1254	87	73.16667	87	73.16667
	Aroclor 1260	0	7	19.33333	16.83333
	PCB 077	0.023	0.024267	0.023	0.024267
	DDD-o,p'	0	0.25	1.933333	2.5
	DDE-o,p'	4.5	4.133333	4.5	4.133333
	DDT-o,p'	0	0	1.933333	2.566667
	DDD-p,p'	7.666667	6.766667	7.666667	6.766667
	DDE-p,p'	50	43.5	50	43.5
	DDT-p,p'	31.33333	15.73333	31.33333	15.73333
Sta. 24	1,2,3,4,6,7,8-HpCDF		0.000257		0.000257
	1,2,3,4,7,8,9-HpCDF		8.67E-05		8.67E-05
	1,2,3,4,7,8-HxCDD		0.00001		0.00002
	1,2,3,4,7,8-HxCDF		0		2.33E-05
	1,2,3,6,7,8-HxCDD		0.000163		0.000163

**Appendix E-8. Pacific Lamprey station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	1,2,3,6,7,8-HxCDF		0.000223		0.000223
	1,2,3,7,8,9-HxCDD		0.000153		0.000153
	1,2,3,7,8,9-HxCDF		2.33E-05		3.67E-05
	1,2,3,7,8-PeCDD		0		0.00004
	1,2,3,7,8-PeCDF		0		2.33E-05
	1,2,4-Trichlorobenzene		0.000437		0.000437
	1,2-Diphenylhydrazine		0		9.5
	2,3,4,6,7,8-HxCDF		0		9.5
	2,3,4,6-Tetrachlorophenol		0.000117		0.000117
	2,3,4,7,8-PeCDF		0		851.6667
	2,3,7,8-TCDD		5.33E-05		0.000113
	2,3,7,8-TCDF		0.00002		4.33E-05
	2,4,5-Trichlorophenol		0.00302		0.00302
	2,4,6-Trichlorophenol		0		851.6667
	2,4-Dichlorophenol		0		851.6667
	2,4-Dimethylphenol		0		851.6667
	2,4-Dinitrotoluene		0		2129.333
	2,6-Dinitrotoluene		0		19
	2-Chloronaphthalene		0		38.03333
	2-Chlorophenol		0		19
	3,4,5-Trichloroguaiacol		0		851.6667
	3,4,6-Trichloroguaiacol		0		2129.333
	3,4-Dichloroguaiacol		0		851.6667
	4,5,6-Trichloroguaiacol		0		2129.333
	4,5-Dichloroguaiacol		0		2129.333
	4,6-Dichloroguaiacol		0		2129.333
	4-Bromophenyl-Phenylether		0		2129.333
	4-Chloro-3-methylphenol		0		9.5
	4-Chloroguaiacol		0		851.6667
	4-Chlorophenyl-Phenylether		0		2129.333
	9H-Fluorene		0		9.5
	Acenaphthene		0		9.5
	Acenaphthylene		0		21
	Aldrin		0		9.5
	Alpha-BHC		0		1.966667
	Alpha-Chlordene		0		1.966667
	Aluminum		0		1.966667
	Anthracene		733.3333		1400
	Antimony		0		9.5
	Arsenic		0		50
	Barium		160		160
	Benzene, 1,2-dichloro-		0		200
	Benzene, 1,3-dichloro-		0		9.5
	Benzene, 1,4-dichloro-		0		9.5
	Benzo(a)anthracene		0		9.5
	Benzo(a)pyrene		0		9.5

**Appendix E-8. Pacific Lamprey station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Benzo(g,h,i)perylene		0		22.6
	Benzo[b]Fluoranthene		0		45.2
	Benzo[k]fluoranthene		0		22.6
	Beryllium		0		22.6
	Beta-BHC		0		4
	bis(2-Chloroisopropyl)ether		0		1.966667
	Cadmium		0		19
	Chromium		65.66667		65.66667
	Chrysene		90		123.3333
	cis-Chlordane (alpha-Chlordane)		0		9.5
	cis-Nonachlor		11.53333		11.53333
	Cobalt		12.9		12.9
	Copper		75		75
	DDMU		4966.667		4966.667
	Delta-BHC		6		6
	Dibenz[a,h]anthracene		0		1.966667
	Dibenzofuran		0		45.2
	Endosulfan Sulfate		0		9.5
	Fluoranthene		#DIV/0!		#DIV/0!
	Gamma-Chlordane		5.6		18.06667
	Gamma-Chlordene		2.8		2.8
	Heptachlor		0		1.966667
	Heptachlor Epoxide		0		1.966667
	Hexachlorobenzene		#DIV/0!		#DIV/0!
	Hexachlorobutadiene		10.26667		10.26667
	Hexachloroethane		0		9.5
	Indeno(1,2,3-cd)pyrene		0		9.5
	Lead		0		45.2
	Lindane		38.66667		38.66667
	Manganese		0		1.966667
	Mercury		254.6667		254.6667
	Mirex		176		176
	Naphthalene		0		1.966667
	Naphthalene, 1-methyl-		0		16.13333
	Naphthalene, 2-methyl-		0		9.5
	Nickel		0		9.5
	Nitrobenzene		283.6667		283.6667
	n-Nitrosodiphenylamine		0		9.5
	OCDD		#DIV/0!		#DIV/0!
	OCDF		0.000717		0.000717
	Oxychlordane		8.33E-05		8.33E-05
	PCB 105		5.133333		5.133333
	PCB 114		1.733333		1.733333
	PCB 118		0.180667		0.180667
	PCB 123		5.033333		5.033333
	PCB 126		0.065367		0.065367

**Appendix E-8. Pacific Lamprey station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	PCB 156		0.025		0.025
	PCB 157		0.413667		0.413667
	PCB 167		0.079633		0.079633
	PCB 169		0.248		0.248
	PCB 170		0		0.001853
	PCB 180		0.636		0.636
	PCB 189		2.216667		2.216667
	Pentachloroanisol		0.026267		0.026267
	Pentachlorophenol		1.433333		1.433333
	Phenanthrene		0		851.6667
	Phenol		5.066667		11.3
	Pyrene		0		851.6667
	Retene		0		19
	Selenium		0		19
	Silver		547.6667		547.6667
	Tetrachloroguaiacol		0		100
	Thallium		0		851.6667
	Toxaphene		0		50
	trans-Nonachlor		0		58.33333
	Vanadium		22.33333		22.33333
	Zinc		43.33333		43.33333
	Aroclor 1016		22033.33		22033.33
	Aroclor 1221		0		19.66667
	Aroclor 1232		0		19.66667
	Aroclor 1242		0		19.66667
	Aroclor 1248		0		19.66667
	Aroclor 1254		0		19.66667
	Aroclor 1260		130		130
	PCB 077		0		19.66667
	DDD-o,p'		0.033633		0.033633
	DDE-o,p'		4.533333		4.533333
	DDT-o,p'		5.233333		5.9
	DDD-p,p'		1.733333		2.4
	DDE-p,p'		23.66667		23.66667
	DDT-p,p'		70.66667		70.66667
			15.7		15.7

**Appendix E-9. Rainbow trout station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WB	Fillet+skin	WB
Sta. 49	1,2,3,4,6,7,8-HpCDD	0.000263	0.000257	0.000263	0.000257
	1,2,3,4,6,7,8-HpCDF	0.000173	5.33E-05	0.000173	6.33E-05
	1,2,3,4,7,8,9-HpCDF	0.000113	0	0.00013	0.00002
	1,2,3,4,7,8-HxCDD	0.000167	0.00013	0.000167	0.00013
	1,2,3,4,7,8-HxCDF	7.33E-05	2.33E-05	7.33E-05	2.67E-05
	1,2,3,6,7,8-HxCDD	7.33E-05	0.000127	0.00008	0.00013
	1,2,3,6,7,8-HxCDF	8.33E-05	4.67E-05	8.67E-05	4.67E-05
	1,2,3,7,8,9-HxCDD	0.00012	3.67E-05	0.000123	0.00004
	1,2,3,7,8,9-HxCDF	0.000153	0.00008	0.000157	0.00008
	1,2,3,7,8-PeCDD	0.000177	0.00023	0.00018	0.00023
	1,2,3,7,8-PeCDF	8.67E-05	4.33E-05	8.67E-05	4.67E-05
	1,2,4-Trichlorobenzene	0	0	4.433333	24.33333
	1,2-Diphenylhydrazine	0	0	4.433333	24.33333
	2,3,4,6,7,8-HxCDF	0.00022	0.000177	0.00022	0.000177
	2,3,4,6-Tetrachlorophenol	0	0	177.3333	194.3333
	2,3,4,7,8-PeCDF	0.00003	8.33E-05	3.67E-05	8.33E-05
	2,3,7,8-TCDD	0.000123	0.000167	0.000123	0.000167
	2,3,7,8-TCDF	0.000153	0.00029	0.000153	0.00029
	2,4,5-Trichlorophenol	0	0	177.3333	194.3333
	2,4,6-Trichlorophenol	0	0	177.3333	194.3333
	2,4-Dichlorophenol	0	0	177.3333	194.3333
	2,4-Dimethylphenol	0	0	443.3333	485.8333
	2,4-Dinitrotoluene	0	0	8.833333	48.6
	2,6-Dinitrotoluene	0	0	17.73333	97.26667
	2-Chloronaphthalene	0	0	8.833333	48.6
	2-Chlorophenol	0	0	177.3333	194.3333
	3,4,5-Trichloroguaiacol	0	0	443.3333	485.8333
	3,4,6-Trichloroguaiacol	0	0	177.3333	194.3333
	3,4-Dichloroguaiacol	0	0	443.3333	485.8333
	4,5,6-Trichloroguaiacol	0	0	443.3333	485.8333
	4,5-Dichloroguaiacol	0	0	443.3333	485.8333
	4,6-Dichloroguaiacol	0	0	443.3333	485.8333
	4-Bromophenyl-Phenylether	0	0	4.433333	24.33333
	4-Chloro-3-methylphenol	0	0	177.3333	194.3333
	4-Chloroguaiacol	0	0	443.3333	485.8333
	4-Chlorophenyl-Phenylether	0	0	4.433333	24.33333
	9H-Fluorene	0	0	4.433333	24.33333
	Acenaphthene	0	0	8.833333	48.6
	Acenaphthylene	0	0	4.433333	24.33333
	Aldrin	0	0	2.4	3.466667
	Alpha-BHC	0	0	2.4	3.466667
	Alpha-Chlordene	0	0	2.4	3.466667
	Aluminum	0	8986.667	1000	8986.667
	Anthracene	0	1.833333	4.433333	19.26667
	Antimony	0	0	50	50
	Arsenic	0	0	50	50

**Appendix E-9. Rainbow trout station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WB	Fillet+skin	WB
	Barium	86.66667	832	220	832
	Benzene, 1,2-dichloro-	0	0	4.433333	24.33333
	Benzene, 1,3-dichloro-	0	0	4.433333	24.33333
	Benzene, 1,4-dichloro-	0	0	4.433333	24.33333
	Benzo(a)anthracene	0	0	4.433333	24.33333
	Benzo(a)pyrene	0	0	4.433333	24.33333
	Benzo(g,h,i)perylene	0	0	8.833333	48.6
	Benzo[b]Fluoranthene	0	0	4.433333	24.33333
	Benzo[k]fluoranthene	0	0	4.433333	24.33333
	Beryllium	3.966667	0	5.3	4
	Beta-BHC	0	0	2.4	3.466667
	bis(2-Chloroisopropyl)ether	0	0	8.833333	48.6
	Cadmium	0	1.533333	4	4.2
	Chromium	0	40	100	106.6667
	Chrysene	0	0	4.433333	24.33333
	cis-Chlordane (alpha-Chlordane)	0	0	2.4	3.466667
	cis-Nonachlor	0	0	2.4	3.466667
	Cobalt	18.66667	60	18.66667	60
	Copper	476.6667	1079.667	476.6667	1079.667
	DDMU	0	0	2.4	3.466667
	Delta-BHC	0	0	2.4	3.466667
	Dibenz[a,h]anthracene	0	0	8.833333	48.6
	Dibenzofuran	0	0	4.433333	24.33333
	Endosulfan Sulfate	0	0	2.4	3.466667
	Fluoranthene	0	11.46667	8.833333	46.26667
	Gamma-Chlordane	0	0	2.4	3.466667
	Gamma-Chlordene	0	0	2.4	3.466667
	Heptachlor	0	0	2.4	3.466667
	Heptachlor Epoxide	0	0	2.4	3.466667
	Hexachlorobenzene	0	0	2.4	3.466667
	Hexachlorobutadiene	0	0	4.433333	24.33333
	Hexachloroethane	0	0	4.433333	24.33333
	Indeno(1,2,3-cd)pyrene	0	0	8.833333	48.6
	Lead	0	24	10	27.33333
	Lindane	0	0	2.4	3.466667
	Manganese	516	3553.333	516	3553.333
	Mercury	69.33333	39.33333	69.33333	53.33333
	Mirex	0	0	2.4	3.466667
	Naphthalene	0	0	8.8	24.33333
	Naphthalene, 1-methyl-	0	0	4.466667	24.33333
	Naphthalene, 2-methyl-	8.366667	0	8.366667	24.33333
	Nickel	67	230.3333	67	230.3333
	Nitrobenzene	0	0	4.433333	24.33333
	n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	0.0006	0.000407	0.0006	0.000407
	OCDF	0.000347	2.33E-05	0.000347	0.00003

**Appendix E-9. Rainbow trout station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WB	Fillet+skin	WB
	Oxychlorthane	0	0	2.4	3.466667
	PCB 105	0.425	0.597333	0.425	0.597333
	PCB 114	0.034233	0.049867	0.034233	0.049867
	PCB 118	0.943667	1.34	0.943667	1.34
	PCB 123	0.0155	0.022467	0.0155	0.022467
	PCB 126	0.00219	0.003133	0.00219	0.003133
	PCB 156	0.192667	0.273333	0.192667	0.273333
	PCB 157	0.0392	0.0549	0.0392	0.0549
	PCB 167	0.073433	0.105333	0.073433	0.105333
	PCB 169	0	0	0.00068	0.000717
	PCB 170	0.209667	0.280333	0.209667	0.280333
	PCB 180	0.594333	0.810333	0.594333	0.810333
	PCB 189	0.007953	0.011433	0.007953	0.011433
	Pentachloroanisol	0	0.566667	2.4	2.366667
	Pentachlorophenol	0	0	177.3333	194.3333
	Phenanthrene	0	16.53333	4.433333	33.96667
	Phenol	0	0	177.3333	194.3333
	Pyrene	0	148.6667	8.833333	183.4667
	Retene	0	0	8.833333	48.6
	Selenium	236.6667	320	236.6667	320
	Silver	0	0	100	100
	Tetrachloroguaiacol	0	0	177.3333	194.3333
	Thallium	0	0	50	50
	Toxaphene	0	0	57	62
	trans-Nonachlor	0	0	2.4	3.466667
	Vanadium	11	83.66667	14.33333	83.66667
	Zinc	8533.333	25300	8533.333	25300
	PCB 077	0.009467	0.017333	0.009467	0.017333
	Aroclor 1016	0	0	19	20.66667
	Aroclor 1221	0	0	19	20.66667
	Aroclor 1232	0	0	19	20.66667
	Aroclor 1242	0	0	19	20.66667
	Aroclor 1248	0	0	19	20.66667
	Aroclor 1254	11.66667	14.33333	11.66667	14.33333
	Aroclor 1260	0	0	19	20.66667
	DDD-o,p'	0	0	2.4	3.466667
	DDE-o,p'	0	0	2.4	3.466667
	DDT-o,p'	0	0	2.4	3.466667
	DDD-p,p'	0	1.2	2.4	3
	DDE-p,p'	44.66667	77.66667	44.66667	77.66667
	DDT-p,p'	3.766667	10.5	3.766667	10.5
Sta. 56	1,2,3,4,6,7,8-HpCDD		0.00008		0.00009
	1,2,3,4,6,7,8-HpCDF		0		0.000025
	1,2,3,4,7,8,9-HpCDF		0		0.000025
	1,2,3,4,7,8-HxCDD		0		0.000025
	1,2,3,4,7,8-HxCDF		0		0.00002

**Appendix E-9. Rainbow trout station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits			
		DL=0 Fillet+skin	DL=0 WB	DL=DL Fillet+skin	DL=DL WB
	1,2,3,6,7,8-HxCDD		0.000035		0.000045
	1,2,3,6,7,8-HxCDF		0		0.00002
	1,2,3,7,8,9-HxCDD		0.000025		0.00004
	1,2,3,7,8,9-HxCDF		0		0.00002
	1,2,3,7,8-PeCDD		0		0.000045
	1,2,3,7,8-PeCDF		0		0.00003
	1,2,4-Trichlorobenzene		0		8.9
	1,2-Diphenylhydrazine		0		8.9
	2,3,4,6,7,8-HxCDF		0		0.00002
	2,3,4,6-Tetrachlorophenol		0		357
	2,3,4,7,8-PeCDF		0		0.00003
	2,3,7,8-TCDD		0.00005		0.00006
	2,3,7,8-TCDF		0.00014		0.00016
	2,4,5-Trichlorophenol		0		357
	2,4,6-Trichlorophenol		0		357
	2,4-Dichlorophenol		0		357
	2,4-Dimethylphenol		0		892
	2,4-Dinitrotoluene		0		17.85
	2,6-Dinitrotoluene		0		35.7
	2-Chloronaphthalene		0		17.85
	2-Chlorophenol		0		357
	3,4,5-Trichloroguaiacol		0		892
	3,4,6-Trichloroguaiacol		0		357
	3,4-Dichloroguaiacol		0		892
	4,5,6-Trichloroguaiacol		0		892
	4,5-Dichloroguaiacol		0		892
	4,6-Dichloroguaiacol		0		892
	4-Bromophenyl-Phenylether		0		8.9
	4-Chloro-3-methylphenol		0		357
	4-Chloroguaiacol		0		892
	4-Chlorophenyl-Phenylether		0		8.9
	9H-Fluorene		0		8.9
	Acenaphthene		0		17.85
	Acenaphthylene		0		8.9
	Aldrin		0		1.95
	Alpha-BHC		0		1.95
	Alpha-Chlordene		0		1.95
	Aluminum		10150		10150
	Anthracene		0		8.9
	Antimony		0		50
	Arsenic		486.5		486.5
	Barium		320		320
	Benzene, 1,2-dichloro-		0		8.9
	Benzene, 1,3-dichloro-		0		8.9
	Benzene, 1,4-dichloro-		0		8.9
	Benzo(a)anthracene		0		8.9

**Appendix E-9. Rainbow trout station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits			
		DL=0 Fillet+skin	DL=0 WB	DL=DL Fillet+skin	DL=DL WB
	Benzo(a)pyrene		0		8.9
	Benzo(g,h,i)perylene		0		17.85
	Benzo[b]Fluoranthene		0		8.9
	Benzo[k]fluoranthene		0		8.9
	Beryllium		0		4
	Beta-BHC		0		1.95
	bis(2-Chloroisopropyl)ether		0		17.85
	Cadmium		10.05		10.05
	Chromium		55		105
	Chrysene		0		8.9
	cis-Chlordane (alpha-Chlordane)		0		1.95
	cis-Nonachlor		0		1.95
	Cobalt		74		74
	Copper		1805		1805
	DDMU		0		1.95
	Delta-BHC		0		1.95
	Dibenz[a,h]anthracene		0		17.85
	Dibenzofuran		0		8.9
	Endosulfan Sulfate		#DIV/0!		#DIV/0!
	Fluoranthene		0		17.85
	Gamma-Chlordane		0		1.95
	Gamma-Chlordene		0		1.95
	Heptachlor		0		1.95
	Heptachlor Epoxide		#DIV/0!		#DIV/0!
	Hexachlorobenzene		0		1.95
	Hexachlorobutadiene		0		8.9
	Hexachloroethane		0		8.9
	Indeno(1,2,3-cd)pyrene		0		17.85
	Lead		15		15
	Lindane		0		1.95
	Manganese		2145		2145
	Mercury		79		79
	Mirex		0		1.95
	Naphthalene		0		24.35
	Naphthalene, 1-methyl-		0		8.9
	Naphthalene, 2-methyl-		0		8.9
	Nickel		177		177
	Nitrobenzene		0		8.9
	n-Nitrosodiphenylamine		#DIV/0!		#DIV/0!
	OCDD		0.00184		0.00184
	OCDF		0		0.00006
	Oxychlordane		0		1.95
	PCB 105		0.1426		0.1426
	PCB 114		0.01117		0.01117
	PCB 118		0.3		0.3
	PCB 123		0.005865		0.005865

**Appendix E-9. Rainbow trout station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits			
		DL=0 Fillet+skin	DL=0 WB	DL=DL Fillet+skin	DL=DL WB
	PCB 126		0.001335		0.001585
	PCB 156		0.03815		0.03815
	PCB 157		0.010785		0.010785
	PCB 167		0.02575		0.02575
	PCB 169		0		0.001
	PCB 170		0.11965		0.11965
	PCB 180		0.3635		0.3635
	PCB 189		0.00501		0.00501
	Pentachloroanisol		0		1.95
	Pentachlorophenol		0		357
	Phenanthrene		0		8.9
	Phenol		0		357
	Pyrene		0		17.85
	Retene		0		17.85
	Selenium		596		596
	Silver		0		100
	Tetrachloroguaiacol		0		357
	Thallium		0		50
	Toxaphene		0		59
	trans-Nonachlor		0		1.95
	Vanadium		68.5		68.5
	Zinc		27250		27250
	PCB 077		0.00824		0.00824
	Aroclor 1016		0		19.5
	Aroclor 1221		0		19.5
	Aroclor 1232		0		19.5
	Aroclor 1242		0		19.5
	Aroclor 1248		0		19.5
	Aroclor 1254		11.95		11.95
	Aroclor 1260		0		19.5
	DDD-o,p'		0		1.95
	DDE-o,p'		0		1.95
	DDT-o,p'		0		1.95
	DDD-p,p'		0.9		1.9
	DDE-p,p'		6.95		6.95
	DDT-p,p'		0		1.95
Sta. 98	1,2,3,4,6,7,8-HpCDD	0.00024	0.000283	0.00024	0.000283
	1,2,3,4,6,7,8-HpCDF	0.000075	0.00005	9.25E-05	0.00008
	1,2,3,4,7,8,9-HpCDF	0	0.00001	0.00003	4.33E-05
	1,2,3,4,7,8-HxCDD	8.25E-05	7.67E-05	0.000085	0.00011
	1,2,3,4,7,8-HxCDF	0.000005	1.33E-05	2.25E-05	5.67E-05
	1,2,3,6,7,8-HxCDD	0.000135	0.000153	0.000148	0.000187
	1,2,3,6,7,8-HxCDF	0.00001	0.00003	2.75E-05	0.00007
	1,2,3,7,8,9-HxCDD	0.000055	5.67E-05	0.000055	0.00009
	1,2,3,7,8,9-HxCDF	0.00003	5.67E-05	0.000045	9.67E-05
	1,2,3,7,8-PeCDD	0.000128	0.000143	0.000133	0.00016

**Appendix E-9. Rainbow trout station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WB	Fillet+skin	WB
	1,2,3,7,8-PeCDF	0.000035	7.67E-05	3.75E-05	7.67E-05
	1,2,4-Trichlorobenzene	0	0	4.875	4.966667
	1,2-Diphenylhydrazine	0	0	4.875	4.966667
	2,3,4,6,7,8-HxCDF	0.000153	9.67E-05	0.000153	0.000137
	2,3,4,6-Tetrachlorophenol	0	0	194.5	200
	2,3,4,7,8-PeCDF	4.75E-05	7.33E-05	0.00005	0.00009
	2,3,7,8-TCDD	0.000015	6.67E-05	0.000035	6.67E-05
	2,3,7,8-TCDF	0.000263	0.00041	0.000263	0.00041
	2,4,5-Trichlorophenol	0	0	194.5	200
	2,4,6-Trichlorophenol	0	0	194.5	198.6667
	2,4-Dichlorophenol	0	0	194.5	198.6667
	2,4-Dimethylphenol	0	0	486.25	496.6667
	2,4-Dinitrotoluene	0	0	9.725	9.933333
	2,6-Dinitrotoluene	0	0	19.45	19.86667
	2-Chloronaphthalene	0	0	9.725	8.3
	2-Chlorophenol	0	0	194.5	198.6667
	3,4,5-Trichloroguaiacol	0	0	486.25	496.6667
	3,4,6-Trichloroguaiacol	0	0	194.5	198.6667
	3,4-Dichloroguaiacol	0	0	486.25	496.6667
	4,5,6-Trichloroguaiacol	0	0	486.25	496.6667
	4,5-Dichloroguaiacol	0	0	486.25	496.6667
	4,6-Dichloroguaiacol	0	0	486.25	496.6667
	4-Bromophenyl-Phenylether	0	0	4.875	4.966667
	4-Chloro-3-methylphenol	0	0	194.5	198.6667
	4-Chloroguaiacol	0	0	486.25	496.6667
	4-Chlorophenyl-Phenylether	0	0	4.875	4.966667
	9H-Fluorene	0	0	4.875	4.966667
	Acenaphthene	0	0	9.725	9.933333
	Acenaphthylene	0	0	4.875	4.966667
	Aldrin	0	0	1.85	1.833333
	Alpha-BHC	0	0	1.85	1.833333
	Alpha-Chlordene	0	0	1.85	1.833333
	Aluminum	875	2460	2125	10793.33
	Anthracene	0	0	4.875	4.966667
	Antimony	0	0	50	50
	Arsenic	0	0	50	50
	Barium	563.75	562.6667	563.75	562.6667
	Benzene, 1,2-dichloro-	0	0	4.875	4.966667
	Benzene, 1,3-dichloro-	0	0	4.875	4.966667
	Benzene, 1,4-dichloro-	0	0	4.875	4.966667
	Benzo(a)anthracene	0	0	4.875	4.966667
	Benzo(a)pyrene	0	0	4.875	49.26667
	Benzo(g,h,i)perylene	0	0	9.725	98.66667
	Benzo[b]Fluoranthene	0	0	4.875	82
	Benzo[k]fluoranthene	0	0	4.875	82
	Beryllium	4.175	0	6.675	4

**Appendix E-9. Rainbow trout station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WB	Fillet+skin	WB
	Beta-BHC	0	0	1.85	1.833333
	bis(2-Chloroisopropyl)ether	0	0	9.725	9.933333
	Cadmium	1.25	1.533333	4.25	4.2
	Chromium	60	70	110	103.3333
	Chrysene	0	0	4.875	4.966667
	cis-Chlordane (alpha-Chlordane)	0	0	1.85	1.833333
	cis-Nonachlor	0	0	1.85	1.833333
	Cobalt	34.25	73	34.25	73
	Copper	522.25	1193.333	522.25	1193.333
	DDMU	0	0	1.85	1.833333
	Delta-BHC	0	0	1.85	1.833333
	Dibenz[a,h]anthracene	0	0	9.725	98.66667
	Dibenzofuran	0	0	4.875	4.966667
	Endosulfan Sulfate	0	0	1.9	1.833333
	Fluoranthene	0	0	9.725	9.933333
	Gamma-Chlordane	0	0	1.85	1.833333
	Gamma-Chlordene	0	0	1.85	1.833333
	Heptachlor	0	0	1.85	1.833333
	Heptachlor Epoxide	0	0	1.85	1.833333
	Hexachlorobenzene	0	0	1.85	1.833333
	Hexachlorobutadiene	0	0	4.875	4.966667
	Hexachloroethane	0	0	4.875	4.966667
	Indeno(1,2,3-cd)pyrene	0	0	9.725	98.66667
	Lead	0	8.666667	10	12
	Lindane	0	0	1.85	1.833333
	Manganese	407.75	1816.667	407.75	1816.667
	Mercury	82.25	127.3333	82.25	157.3333
	Mirex	0	0	1.85	1.833333
	Naphthalene	0	0	20.225	26.23333
	Naphthalene, 1-methyl-	0	0	4.875	4.966667
	Naphthalene, 2-methyl-	0	1.966667	6.275	7.2
	Nickel	53.5	79	53.5	79
	Nitrobenzene	0	0	4.875	4.966667
	n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	0.000325	0.000427	0.000348	0.000427
	OCDF	3.25E-05	2.67E-05	0.000045	0.00006
	Oxychlordane	0	0	1.85	1.833333
	PCB 105	0.538195	0.770193	0.538195	0.770193
	PCB 114	0.0406	0.058117	0.0406	0.058117
	PCB 118	1.1375	1.653333	1.1375	1.653333
	PCB 123	0.017903	0.02313	0.017903	0.02313
	PCB 126	0.004168	0.005807	0.004168	0.005807
	PCB 156	0.1834	0.25672	0.1834	0.25672
	PCB 157	0.03219	0.04567	0.03219	0.04567
	PCB 167	0.073985	0.10393	0.073985	0.10393
	PCB 169	0	0	0.000938	0.000947

**Appendix E-9. Rainbow trout station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WB	Fillet+skin	WB
	PCB 170	0.174168	0.242863	0.174168	0.242863
	PCB 180	0.4865	0.68003	0.4865	0.68003
	PCB 189	0.003598	0.01096	0.007983	0.01096
	Pentachloroanisol	0	0	1.85	1.833333
	Pentachlorophenol	0	0	194.5	198.6667
	Phenanthrene	0	0	4.875	5.3
	Phenol	0	0	194.5	231
	Pyrene	0	0	9.725	9.933333
	Retene	0	4.433333	9.725	11.1
	Selenium	207.5	383.3333	207.5	383.3333
	Silver	0	0	175	100
	Tetrachloroguaiacol	0	0	194.5	198.6667
	Thallium	0	0	50	50
	Toxaphene	0	0	55.75	55.33333
	trans-Nonachlor	0	0	1.85	1.833333
	Vanadium	18.25	81	23.25	81
	Zinc	15200	36100	15200	36100
	PCB 077	0.013558	0.018603	0.013558	0.018603
	Aroclor 1016	0	0	18.5	18.33333
	Aroclor 1221	0	0	18.5	18.33333
	Aroclor 1232	0	0	18.5	18.33333
	Aroclor 1242	0	0	18.5	18.33333
	Aroclor 1248	0	0	18.5	18.33333
	Aroclor 1254	15.475	15.66667	15.475	21.66667
	Aroclor 1260	0	0	18.5	18.33333
	DDD-o,p'	0	0	1.85	1.833333
	DDE-o,p'	0	1.1	1.85	1.733333
	DDT-o,p'	0	0	1.85	1.833333
	DDD-p,p'	0	0	1.85	1.833333
	DDE-p,p'	5.125	11	5.125	11
	DDT-p,p'	2.4	0	2.875	1.833333
Sta. 101	1,2,3,4,6,7,8-HpCDD		0.0002		0.0002
	1,2,3,4,6,7,8-HpCDF		0.000055		5.75E-05
	1,2,3,4,7,8,9-HpCDF		0.00002		2.25E-05
	1,2,3,4,7,8-HxCDD		0.00011		0.00011
	1,2,3,4,7,8-HxCDF		1.25E-05		1.75E-05
	1,2,3,6,7,8-HxCDD		0.0001		0.0001
	1,2,3,6,7,8-HxCDF		0.000035		0.000035
	1,2,3,7,8,9-HxCDD		4.75E-05		4.75E-05
	1,2,3,7,8,9-HxCDF		4.75E-05		0.00005
	1,2,3,7,8-PeCDD		0.000153		0.000153
	1,2,3,7,8-PeCDF		0.000045		0.000045
	1,2,4-Trichlorobenzene		0		6.675
	1,2-Diphenylhydrazine		0		6.675
	2,3,4,6,7,8-HxCDF		0.00014		0.00014
	2,3,4,7,8-PeCDF		0.000045		0.000045

**Appendix E-9. Rainbow trout station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits			
		DL=0 Fillet+skin	DL=0 WB	DL=DL Fillet+skin	DL=DL WB
	2,3,7,8-TCDD		3.25E-05		3.75E-05
	2,3,7,8-TCDF		0.000095		0.000095
	2,4,6-Trichlorophenol		0		266.25
	2,4-Dichlorophenol		0		266.25
	2,4-Dimethylphenol		0		665.625
	2,4-Dinitrotoluene		0		13.275
	2,6-Dinitrotoluene		0		26.625
	2-Chloronaphthalene		0		13.275
	2-Chlorophenol		0		266.25
	3,4,5-Trichloroguaiacol		0		665.625
	3,4,6-Trichloroguaiacol		0		266.25
	3,4-Dichloroguaiacol		0		665.625
	4,5,6-Trichloroguaiacol		0		665.625
	4,5-Dichloroguaiacol		0		665.625
	4,6-Dichloroguaiacol		0		665.625
	4-Bromophenyl-Phenylether		0		6.675
	4-Chloro-3-methylphenol		0		266.25
	4-Chloroguaiacol		0		665.625
	4-Chlorophenyl-Phenylether		0		6.675
	9H-Fluorene		0		6.675
	Acenaphthene		0		13.275
	Acenaphthylene		0		6.675
	Aldrin		0		2.05
	Alpha-BHC		0		2.275
	Alpha-Chlordene		0		2.275
	Aluminum		64460		64460
	Anthracene		0		6.675
	Antimony		0		50
	Arsenic		73		85.5
	Barium		2271.75		2271.75
	Benzene, 1,2-dichloro-		0		6.675
	Benzene, 1,3-dichloro-		0		6.675
	Benzene, 1,4-dichloro-		0		6.675
	Benzo(a)anthracene		0		6.675
	Benzo(a)pyrene		0		6.675
	Benzo(g,h,i)perylene		0		13.275
	Benzo[b]Fluoranthene		0		6.675
	Benzo[k]fluoranthene		0		6.675
	Beryllium		2.75		8.75
	Beta-BHC		0		2.275
	bis(2-Chloroisopropyl)ether		0		13.275
	Cadmium		24.85		25.85
	Chromium		120		120
	Chrysene		0		6.675
	cis-Chlordane (alpha-Chlordane)		0		2.275
	cis-Nonachlor		0		2.275

**Appendix E-9. Rainbow trout station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits			
		DL=0 Fillet+skin	DL=0 WB	DL=DL Fillet+skin	DL=DL WB
	Cobalt		128		128
	Copper		2882.5		2882.5
	DDMU		0		2.15
	Delta-BHC		0		2.275
	Dibenz[a,h]anthracene		0		13.275
	Dibenzofuran		0		6.675
	Endosulfan Sulfate		0		2.275
	Fluoranthene		0		13.275
	Gamma-Chlordane		0		2.275
	Gamma-Chlordene		0		2.275
	Heptachlor		0		2.05
	Heptachlor Epoxide		0		2.275
	Hexachlorobenzene		0		2.275
	Hexachlorobutadiene		0		6.675
	Hexachloroethane		0		6.675
	Indeno(1,2,3-cd)pyrene		0		13.275
	Lead		42.25		42.25
	Lindane		0		2.275
	Manganese		4547.5		4547.5
	Mercury		36.75		36.75
	Mirex		0		2.275
	Naphthalene		0		9.775
	Naphthalene, 1-methyl-		0		6.675
	Naphthalene, 2-methyl-		0		6.675
	Nickel		660		660
	Nitrobenzene		0		6.675
	n-Nitrosodiphenylamine		#DIV/0!		#DIV/0!
	OCDD		0.000288		0.000288
	OCDF		2.75E-05		0.00003
	Oxychlordane		0		6.325
	PCB 105		0.1229		0.1229
	PCB 114		0.010705		0.010775
	PCB 118		0.2744		0.2744
	PCB 123		0.005528		0.005528
	PCB 126		0.002203		0.002323
	PCB 156		0.0451		0.0451
	PCB 157		0		0.00068
	PCB 167		0.02374		0.02374
	PCB 169		0		0.000668
	PCB 170		0.119625		0.119625
	PCB 180		0.40225		0.40225
	PCB 189		0.002035		0.002285
	Pentachloroanisol		0		2.275
	Pentachlorophenol		0		266.25
	Phenanthrene		0		6.675
	Phenol		0		266.25

**Appendix E-9. Rainbow trout station averages at full detection limits
and with the detection limits set to zero.**

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WB	Fillet+skin	WB
	Pyrene		0		13.275
	Retene		0		13.275
	Selenium		255		255
	Silver		0		100
	Tetrachloroguaiacol		0		266.25
	Thallium		0		50
	Toxaphene		0		66
	trans-Nonachlor		0		2.275
	Vanadium		402.25		402.25
	Zinc		26500		26500
	PCB 077		0.004783		0.004783
	Aroclor 1016		0		19.25
	Aroclor 1221		0		19.25
	Aroclor 1232		0		19.25
	Aroclor 1242		0		19.25
	Aroclor 1248		0		19.25
	Aroclor 1254		0		19.25
	Aroclor 1260		1.5		16.25
	DDD-o,p'		0		2.275
	DDE-o,p'		1.075		2.725
	DDT-o,p'		0		2.275
	DDD-p,p'		0.3		2.125
	DDE-p,p'		16.75		16.75
	DDT-p,p'		0.55		2.225

**Appendix E-10. Smallmouth bass, basin averages at full detection limit
and at the detection limit set to zero.**

	Detection Limits			
	DL=DL	DL=DL	DL=0	
	Fillet+skin	Whole Body	Fillet+skin	Whole Body
1,2,4-Trichlorobenzene	7.5	8.733333	0	0
1,2-Diphenylhydrazine	7.5	8.733333	0	0
2,3,4,6-Tetrachlorophenol	299.3333	349.3333	0	0
2,4,5-Trichlorophenol	299.3333	349.3333	0	0
2,4,6-Trichlorophenol	299.3333	349.3333	0	0
2,4-Dichlorophenol	299.3333	349.3333	0	0
2,4-Dimethylphenol	748.6667	874	0	0
2,4-Dinitrotoluene	14.96667	17.46667	0	0
2,6-Dinitrotoluene	29.93333	34.93333	0	0
2-Chloronaphthalene	14.96667	17.46667	0	0
2-Chlorophenol	299.3333	349.3333	0	0
3,4,5-Trichloroguaiacol	748.6667	874	0	0
3,4,6-Trichloroguaiacol	299.3333	349.3333	0	0
3,4-Dichloroguaiacol	748.6667	874	0	0
4,5,6-Trichloroguaiacol	748.6667	874	0	0
4,5-Dichloroguaiacol	748.6667	874	0	0
4,6-Dichloroguaiacol	748.6667	874	0	0
4-Bromophenyl-Phenylether	7.5	8.733333	0	0
4-Chloro-3-methylphenol	299.3333	349.3333	0	0
4-Chloroguaiacol	748.6667	874	0	0
4-Chlorophenyl-Phenylether	7.5	8.733333	0	0
9H-Fluorene	7.5	8.733333	0	0
Acenaphthene	14.96667	17.46667	0	0
Acenaphthylene	7.5	8.733333	0	0
Aldrin	2.033333	1.933333	0	0
Alpha-BHC	2.033333	1.933333	0	0
Alpha-Chlordene	2.033333	1.933333	0	0
Aluminum	6486.667	1292	6486.667	1292
Anthracene	7.5	8.733333	0	0
Antimony	50	50	0	0
Arsenic	136.6667	166.6667	136.6667	166.6667
Barium	493.3333	740.6667	493.3333	740.6667
Benzene, 1,2-dichloro-	7.5	8.733333	0	0
Benzene, 1,3-dichloro-	7.5	8.733333	0	0
Benzene, 1,4-dichloro-	7.5	8.733333	0	0
Benzo(a)anthracene	7.5	8.733333	0	0
Benzo(a)pyrene	7.5	8.733333	0	0
Benzo(g,h,i)perylene	14.96667	17.46667	0	0
Benzo[b]Fluoranthene	7.5	8.733333	0	0
Benzo[k]fluoranthene	7.5	8.733333	0	0
Beryllium	4	4	0	0
Beta-BHC	2.033333	1.933333	0	0
bis(2-Chloroisopropyl)ether	14.96667	17.46667	0	0
Cadmium	4	11.6	0	11.6
Chromium	283.3333	153.3333	283.3333	120
Chrysene	7.5	8.733333	0	0

**Appendix E-10. Smallmouth bass, basin averages at full detection limit
and at the detection limit set to zero.**

	Detection Limits			
	DL=DL	DL=DL	DL=0	
	Fillet+skin	Whole Body	Fillet+skin	Whole Body
cis-Chlordane (alpha-Chlordane)	2.733333	3.433333	1.366667	2.766667
cis-Nonachlor	2.033333	1.733333	0	0.466667
Cobalt	14.66667	142.6667	14.66667	142.6667
Copper	535	524.3333	535	524.3333
DDMU	32	41	32	41
Delta-BHC	2.033333	1.933333	0	0
Dibenz[a,h]anthracene	14.96667	17.46667	0	0
Dibenzofuran	7.5	8.733333	0	0
Endosulfan Sulfate	2.133333	3.8	2.133333	3.8
Fluoranthene	14.96667	17.46667	0	0
Gamma-Chlordane	6.033333	1.933333	4.666667	0
gamma-Chlordene	2.033333	1.933333	0	0
Heptachlor	2.033333	1.933333	0	0
Heptachlor Epoxide	2.033333	1.933333	0	0
Hexachlorobenzene	2.166667	1.233333	0.8	1.233333
Hexachlorobutadiene	7.5	8.733333	0	0
Hexachloroethane	7.5	8.733333	0	0
Indeno(1,2,3-cd)pyrene	14.96667	17.46667	0	0
Lead	30	65.66667	26.66667	65.66667
Lindane	2.033333	1.933333	0	0
Manganese	874.3333	2283.333	874.3333	2283.333
Mercury	416	301.3333	416	301.3333
Mirex	2.033333	1.933333	0	0
Naphthalene	12.56667	16.83333	0	0
Naphthalene, 1-methyl-	7.5	8.733333	0	0
Naphthalene, 2-methyl-	7.5	8.733333	0	0
Nickel	204.6667	75.66667	204.6667	75.66667
Nitrobenzene	7.5	8.733333	0	0
n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Oxychlordane	1.9	1.833333	0.533333	1.833333
Pentachloroanisol	1.63	1.596667	0.263333	0.33
Pentachlorophenol	299.3333	349.3333	0	0
Phenanthrene	8	11.1	0	5.366667
Phenol	299.3333	349.3333	0	0
Pyrene	14.96667	17.46667	0	0
Retene	14.96667	17.46667	0	0
Selenium	489.3333	590	489.3333	590
Silver	100	100	0	0
Tetrachloroguaiacol	299.3333	349.3333	0	0
Thallium	50	50	0	0
Toxaphene	60.33333	58	0	0
trans-Nonachlor	4.666667	10.3	4.666667	10.3
Vanadium	11.33333	63.33333	4.666667	63.33333
Zinc	9670	16533.33	9670	16533.33
Aroclor 1016	20.33333	19.33333	0	0
Aroclor 1221	20.33333	19.33333	0	0

**Appendix E-10. Smallmouth bass, basin averages at full detection limit
and at the detection limit set to zero.**

	Detection Limits			
	DL=DL		DL=0	
	Fillet+skin	Whole Body	Fillet+skin	Whole Body
Aroclor 1232	20.33333	19.33333	0	0
Aroclor 1242	20.33333	19.33333	0	0
Aroclor 1248	20.33333	19.33333	0	0
Aroclor 1254	54.66667	66	54.66667	66
Aroclor 1260	119	130	119	130
DDD-o,p'	15.33333	21.33333	15.33333	21.33333
DDE-o,p'	6.733333	12	6.733333	12
DDT-o,p'	9.9	17	9.9	17
DDD-p,p'	51.33333	53.66667	51.33333	53.66667
DDE-p,p'	770	1290	770	1290
DDT-p,p'	34	62	34	62

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
Sta. 21	1,2,3,4,6,7,8-HpCDD	0.00012	6.33E-05		0.00012	0.00009
	1,2,3,4,6,7,8-HpCDF	0	4.67E-05		2.67E-05	0.00005
	1,2,3,4,7,8,9-HpCDF	0	6.67E-06		2.67E-05	0.00002
	1,2,3,4,7,8-HxCDD	1.33E-05	0		0.00002	0.00002
	1,2,3,4,7,8-HxCDF	0	0.00001		2.67E-05	2.33E-05
	1,2,3,6,7,8-HxCDD	7.33E-05	0.00009		7.33E-05	0.00009
	1,2,3,6,7,8-HxCDF	3.33E-06	1.67E-05		2.67E-05	2.67E-05
	1,2,3,7,8,9-HxCDD	2.67E-05	5.67E-05		0.00003	5.67E-05
	1,2,3,7,8,9-HxCDF	0	1.67E-05		2.67E-05	2.33E-05
	1,2,3,7,8-PeCDD	0.00002	0		0.00003	0.00001
	1,2,3,7,8-PeCDF	6.67E-05	3.67E-05		6.67E-05	0.00005
	1,2,4-Trichlorobenzene	0	0		9.6	9.233333
	1,2-Diphenylhydrazine	0	0		9.6	9.233333
	2,3,4,6,7,8-HxCDF	0	6.67E-06		2.67E-05	0.00002
	2,3,4,6-Tetrachlorophenol	0	0		383.6667	368.6667
	2,3,4,7,8-PeCDF	8.67E-05	0.00008		8.67E-05	9.33E-05
	2,3,7,8-TCDD	1.33E-05	0		2.33E-05	0.00002
	2,3,7,8-TCDF	0.000583	0.00077		0.000583	0.00077
	2,4,5-Trichlorophenol	0	0		383.6667	368.6667
	2,4,6-Trichlorophenol	0	0		383.6667	368.6667
	2,4-Dichlorophenol	0	0		383.6667	368.6667
	2,4-Dimethylphenol	0	0		959.3333	922
	2,4-Dinitrotoluene	0	0		19.16667	18.4
	2,6-Dinitrotoluene	0	0		38.36667	36.86667
	2-Chloronaphthalene	0	0		19.16667	18.4
	2-Chlorophenol	0	0		383.6667	368.6667
	3,4,5-Trichloroguaiacol	0	0		959.3333	922
	3,4,6-Trichloroguaiacol	0	0		383.6667	368.6667
	3,4-Dichloroguaiacol	0	0		959.3333	922
	4,5,6-Trichloroguaiacol	0	0		959.3333	922
	4,5-Dichloroguaiacol	0	0		959.3333	922
	4,6-Dichloroguaiacol	0	0		959.3333	922
	4-Bromophenyl-Phenylether	0	0		9.6	9.233333
	4-Chloro-3-methylphenol	0	0		383.6667	368.6667
	4-Chloroguaiacol	0	0		959.3333	922
	4-Chlorophenyl-Phenylether	0	0		9.6	9.233333
	9H-Fluorene	0	0		9.6	9.233333
	Acenaphthene	0	0		19.16667	18.4
	Acenaphthylene	0	0		9.6	9.233333
	Aldrin	0	0		1.9	1.933333
	Alpha-BHC	0	0		1.9	1.933333
	Alpha-Chlordene	0	0		1.9	1.933333
	Aluminum	0	0		1000	1000
	Anthracene	0	0		9.6	9.233333
	Antimony	0	0		50	50
	Arsenic	866.6667	1008		866.6667	1008

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
Barium		0	0		200	200
Benzene, 1,2-dichloro-		0	0		9.6	9.233333
Benzene, 1,3-dichloro-		0	0		9.6	9.233333
Benzene, 1,4-dichloro-		0	0		9.6	9.233333
Benzo(a)anthracene		0	0		9.6	9.233333
Benzo(a)pyrene		0	0		9.6	9.233333
Benzo(g,h,i)perylene		0	0		19.16667	18.4
Benzo[b]Fluoranthene		0	0		9.6	9.233333
Benzo[k]fluoranthene		0	0		9.6	9.233333
Beryllium		0	0		4	4
Beta-BHC		0	0		1.9	1.933333
bis(2-Chloroisopropyl)ether		0	0		19.16667	18.4
Cadmium		0	7.166667		4	7.166667
Chromium		390	493		390	493
Chrysene		0	0		9.6	9.233333
cis-Chlordane (alpha-Chlordane)		0	0		1.9	1.933333
cis-Nonachlor		0	0		1.9	1.933333
Cobalt		3.266667	170.3333		3.266667	170.3333
Copper		536.3333	1256.667		536.3333	1256.667
DDMU		0	0		1.9	1.933333
Delta-BHC		0	0		1.9	1.933333
Dibenz[a,h]anthracene		0	0		19.16667	18.4
Dibenzofuran		0	0		9.6	9.233333
Endosulfan Sulfate		#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Fluoranthene		0	0		19.16667	18.4
Gamma-Chlordane		0	0		1.9	1.933333
gamma-Chlordene		0	0		1.9	1.933333
Heptachlor		0	0		1.9	1.933333
Heptachlor Epoxide		#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Hexachlorobenzene		1.4	3.333333		2	3.333333
Hexachlorobutadiene		0	0		9.6	9.233333
Hexachloroethane		0	0		9.6	9.233333
Indeno(1,2,3-cd)pyrene		0	0		19.16667	18.4
Lead		0	0		10	10
Lindane		0	0		1.9	1.933333
Manganese		72.33333	298		72.33333	298
Mercury		0	0		100.6667	113.3333
Mirex		0	0		1.9	1.933333
Naphthalene		0	0		17.1	18
Naphthalene, 1-methyl-		0	0		9.6	9.233333
Naphthalene, 2-methyl-		0	0		9.6	9.233333
Nickel		0	974.6667		30	974.6667
Nitrobenzene		0	0		9.6	9.233333
n-Nitrosodiphenylamine		#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
OCDD		7.67E-05	0.000253		0.000113	0.000257
OCDF		4.33E-05	0.00004		0.00006	4.67E-05

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
Oxychlorthane		0	0		1.9	1.933333
PCB 105		0.167333	0.244667		0.167333	0.244667
PCB 114		0.0149	0.0194		0.0149	0.0194
PCB 118		0.361667	0.524667		0.361667	0.524667
PCB 123		0.006107	0.009693		0.006107	0.009693
PCB 126		0	0.002293		0.001287	0.002293
PCB 156		0.0367	0.047967		0.0367	0.047967
PCB 157		0.00949	0.013867		0.00949	0.013867
PCB 167		0.0204	0.027833		0.0204	0.027833
PCB 169		0	0		0.000917	0.00133
PCB 170		0.079933	0.099867		0.079933	0.099867
PCB 180		0.261333	0.334333		0.261333	0.334333
PCB 189		0.002573	0.002813		0.002953	0.003157
Pentachloroanisol		0	0.903333		1.9	0.903333
Pentachlorophenol		0	0		383.6667	368.6667
Phenanthrene		0	0		9.6	10.63333
Phenol		0	0		383.6667	434
Pyrene		0	41.33333		19.16667	53.96667
Retene		0	0		19.16667	18.4
Selenium		380	448.6667		380	448.6667
Silver		0	0		100	100
Tetrachloroguaiacol		0	0		383.6667	368.6667
Thallium		0	0		50	50
Toxaphene		0	0		56	57.66667
trans-Nonachlor		2.566667	4.133333		2.566667	4.133333
Vanadium		0	23.33333		10	23.33333
Zinc		5230	32000		5230	32000
Aroclor 1016		0	0		19	19.33333
Aroclor 1221		0	0		19	19.33333
Aroclor 1232		0	0		19	19.33333
Aroclor 1242		0	0		19	19.33333
Aroclor 1248		0	0		19	19.33333
Aroclor 1254		10.06667	15.66667		10.06667	15.66667
Aroclor 1260		0	0		19	19.33333
PCB 077		0.007597	0.011167		0.007597	0.011167
DDD-o,p'		0	0		1.9	1.933333
DDE-o,p'		0	1.063333		1.9	1.063333
DDT-o,p'		0	0		1.9	1.933333
DDD-p,p'		1.433333	2.966667		1.433333	2.966667
DDE-p,p'		7.733333	11.66667		7.733333	11.66667
DDT-p,p'		1.833333	4.233333		1.833333	4.233333
Sta. 30						
1,2,3,4,6,7,8-HpCDD	0.00009	0.00028	0.000117	0.0001	0.00028	0.000143
1,2,3,4,6,7,8-HpCDF	0.00002	9.33E-05	8.67E-05	4E-05	0.00011	8.67E-05
1,2,3,4,7,8,9-HpCDF	0	0	0	3E-05	3.67E-05	0.00004
1,2,3,4,7,8-HxCDD	7.3E-05	4.33E-05	0.000123	8E-05	6.33E-05	0.000123
1,2,3,4,7,8-HxCDF	0	0	0	3E-05	2.33E-05	3.33E-05

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0	DL=0	DL=0	DL=DL	DL=DL	DL=DL
	Egg	Fillet+skin	WholeBody	Egg	Fillet+skin	WholeBody
1,2,3,6,7,8-HxCDD	0.00005	0.00005	2.67E-05	6E-05	5.67E-05	5.33E-05
1,2,3,6,7,8-HxCDF	6.7E-06	0.00003	3.33E-05	3E-05	0.00004	4.67E-05
1,2,3,7,8,9-HxCDD	0.00002	3.33E-05	3.33E-05	4E-05	4.67E-05	4.67E-05
1,2,3,7,8,9-HxCDF	0	4.33E-05	2.33E-05	3E-05	0.00005	4.67E-05
1,2,3,7,8-PeCDD	0.00015	0.000103	0.000127	0.0001	0.00011	0.000137
1,2,3,7,8-PeCDF	0	0.00004	0.000123	3E-05	6.33E-05	0.000123
1,2,4-Trichlorobenzene	0	0	0	23.9	9.033333	19.63333
1,2-Diphenylhydrazine	0	0	0	23.9	9.033333	19.63333
2,3,4,6,7,8-HxCDF	0.00014	0.000143	0.00016	0.0001	0.000143	0.00016
2,3,4,6-Tetrachlorophenol	0	0	0	560	361.6667	354
2,3,4,7,8-PeCDF	0.00005	3.67E-05	5.67E-05	6E-05	5.67E-05	7.67E-05
2,3,7,8-TCDD	0.00001	0	1.33E-05	3E-05	0.00003	3.67E-05
2,3,7,8-TCDF	0.00043	0.0006	0.000673	0.0004	0.0006	0.000673
2,4,5-Trichlorophenol	0	0	0	560	361.6667	354
2,4,6-Trichlorophenol	0	0	0	560	361.6667	354
2,4-Dichlorophenol	0	0	0	560	361.6667	354
2,4-Dimethylphenol	0	0	0	1399.3	904.3333	885.3333
2,4-Dinitrotoluene	0	0	0	47.8	18.1	39.23333
2,6-Dinitrotoluene	0	0	0	95.733	36.16667	78.63333
2-Chloronaphthalene	0	0	0	47.8	18.1	39.23333
2-Chlorophenol	0	0	0	560	361.6667	354
3,4,5-Trichloroguaiacol	0	0	0	1399.3	904.3333	885.3333
3,4,6-Trichloroguaiacol	0	0	0	560	361.6667	354
3,4-Dichloroguaiacol	0	0	0	1399.3	904.3333	885.3333
4,5,6-Trichloroguaiacol	0	0	0	1399.3	904.3333	885.3333
4,5-Dichloroguaiacol	0	0	0	1399.3	904.3333	885.3333
4,6-Dichloroguaiacol	0	0	0	1399.3	904.3333	885.3333
4-Bromophenyl-Phenylether	0	0	0	23.9	9.033333	19.63333
4-Chloro-3-methylphenol	0	0	0	560	361.6667	354
4-Chloroguaiacol	0	0	0	1399.3	904.3333	885.3333
4-Chlorophenyl-Phenylether	0	0	0	23.9	9.033333	19.63333
9H-Fluorene	0	0	0	23.9	9.033333	19.63333
Acenaphthene	8.63333	0	0	49.967	18.1	39.23333
Acenaphthylene	0	0	0	23.9	9.033333	19.63333
Aldrin	0	0	0	3.1667	3.666667	3.766667
Alpha-BHC	0	0	0	3.1667	3.666667	3.766667
Alpha-Chlordene	0	0	0	3.1667	3.666667	3.766667
Aluminum	0	0	0	1000	1000	1000
Anthracene	0	0	0	23.9	9.033333	19.63333
Antimony	0	0	0	50	50	50
Arsenic	513.333	808.6667	835	513.33	808.6667	835
Barium	0	0	96.66667	200	200	230
Benzene, 1,2-dichloro-	0	0	0	23.9	9.033333	19.63333
Benzene, 1,3-dichloro-	0	0	0	23.9	9.033333	19.63333
Benzene, 1,4-dichloro-	0	0	0	23.9	9.033333	19.63333
Benzo(a)anthracene	0	0	0	23.9	9.033333	19.63333

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
Benzo(a)pyrene	0	0	0	23.9	9.033333	19.63333
Benzo(g,h,i)perylene	0	0	0	47.8	18.1	39.23333
Benzo[b]Fluoranthene	0	0	0	23.9	9.033333	19.63333
Benzo[k]fluoranthene	0	0	0	23.9	9.033333	19.63333
Beryllium	0	0	0	4	4	4.666667
Beta-BHC	0	0	0	3.1667	3.666667	3.766667
bis(2-Chloroisopropyl)ether	0	0	0	47.8	18.1	39.23333
Cadmium	30.3333	12.66667	137.3333	30.333	12.66667	137.3333
Chromium	73.3333	0	100	106.67	100	133.3333
Chrysene	0	0	0	23.9	9.033333	19.63333
cis-Chlordane (alpha-Chlordane)	0	0	0	3.1667	3.666667	3.766667
cis-Nonachlor	0	0	0	3.1667	3.666667	3.766667
Cobalt	57.6667	4.1	122.6667	57.667	4.1	122.6667
Copper	6496.67	836	1373.333	6496.7	836	1373.333
DDMU	0	0	0	3.1667	3.666667	3.766667
Delta-BHC	0	0	0	3.1667	3.666667	3.766667
Dibenz[a,h]anthracene	0	0	0	47.8	18.1	39.23333
Dibenzofuran	0	0	0	23.9	9.033333	19.63333
Endosulfan Sulfate	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Fluoranthene	0	0	0	47.8	18.1	39.23333
Gamma-Chlordane	0	0	0	3.1667	3.666667	3.766667
gamma-Chlordene	0	0	0	3.1667	3.666667	3.766667
Heptachlor	0	0	0	3.1667	3.666667	3.766667
Heptachlor Epoxide	0	0	0	3.1667	3.666667	3.766667
Hexachlorobenzene	3.63333	3.133333	3	3.6333	3.133333	3
Hexachlorobutadiene	0	0	0	23.9	9.033333	19.63333
Hexachloroethane	0	0	0	23.9	9.033333	19.63333
Indeno(1,2,3-cd)pyrene	0	0	0	47.8	18.1	39.23333
Lead	6.33333	0	13.33333	13	10	13.33333
Lindane	0.63333	0	0	2.5333	3.666667	3.766667
Manganese	1563.33	97	376.6667	1563.3	97	376.6667
Mercury	0	42	63.33333	86.333	106.6667	96
Mirex	0	0	0	3.1667	3.666667	3.766667
Naphthalene	0	0	0	67.267	37.13333	83.03333
Naphthalene, 1-methyl-	0	0	0	23.9	9.033333	19.63333
Naphthalene, 2-methyl-	0	0	0	25.167	9.033333	20.36667
Nickel	89.6667	24.33333	0	89.667	34.33333	30
Nitrobenzene	0	0	0	23.9	9.033333	19.63333
n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
OCDD	0.00034	0.000893	0.00027	0.0003	0.000913	0.00027
OCDF	0	0	0	4E-05	4.67E-05	5.33E-05
Oxychlordane	0	0	0	3.1667	3.666667	3.766667
PCB 105	0.18067	0.233333	0.264667	0.1807	0.233333	0.264667
PCB 114	0.01713	0.0214	0.024833	0.0171	0.0214	0.024833
PCB 118	0.414	0.542	0.612667	0.414	0.542	0.612667
PCB 123	0.00802	0.011487	0.012967	0.008	0.011487	0.012967

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station		Detection Limits					
		DL=0	DL=0	DL=0	DL=DL	DL=DL	DL=DL
		Egg	Fillet+skin	WholeBody	Egg	Fillet+skin	WholeBody
	PCB 126	0.0015	0.003287	0.00343	0.0018	0.003287	0.00343
	PCB 156	0.02533	0.044367	0.048233	0.0253	0.044367	0.048233
	PCB 157	0.00855	0.011667	0.013133	0.0086	0.011667	0.013133
	PCB 167	0.0171	0.029333	0.031233	0.0171	0.029333	0.031233
	PCB 169	0	0	0	0.001	0.001053	0.001033
	PCB 170	0.04937	0.090633	0.089233	0.0494	0.090633	0.089233
	PCB 180	0.13633	0.261333	0.267	0.1363	0.261333	0.267
	PCB 189	0.00146	0.002953	0.002993	0.0015	0.002953	0.002993
	Pentachloroanisol	0	0	0	3.1667	3.666667	3.766667
	Pentachlorophenol	0	0	0	560	361.6667	354
	Phenanthrene	0	0	0	23.9	10.93333	20.76667
	Phenol	0	0	0	560	378.3333	354
	Pyrene	0	0	0	47.8	18.1	39.23333
	Retene	0	0	0	47.8	18.1	39.23333
	Selenium	4313.33	413.3333	566.6667	4313.3	413.3333	566.6667
	Silver	0	0	0	100	100	133.3333
	Tetrachloroguaiacol	0	0	0	560	361.6667	354
	Thallium	0	0	0	50	50	50
	Toxaphene	0	0	0	92	110	110
	trans-Nonachlor	1.06667	0	0	3.6	3.666667	3.766667
	Vanadium	0	0	12	10	10	15.33333
	Zinc	39966.7	6260	24500	39967	6260	24500
	Aroclor 1016	0	0	0	31.667	36.66667	37.66667
	Aroclor 1221	0	0	0	31.667	36.66667	37.66667
	Aroclor 1232	0	0	0	31.667	36.66667	37.66667
	Aroclor 1242	0	0	0	31.667	36.66667	37.66667
	Aroclor 1248	0	0	0	31.667	36.66667	37.66667
	Aroclor 1254	17.6667	21.66667	19.66667	17.667	21.66667	19.66667
	Aroclor 1260	0	0	0	31.667	36.66667	37.66667
	PCB 077	0.00996	0.0123	0.012833	0.01	0.0123	0.012833
	DDD-o,p'	0	0	0	3.1667	3.666667	3.766667
	DDE-o,p'	0	0	0	3.1667	3.666667	3.766667
	DDT-o,p'	0	0	0	3.1667	3.666667	3.766667
	DDD-p,p'	2.8	2.766667	1.9	2.8	2.766667	3.3
	DDE-p,p'	9.83333	11.3	11.66667	9.8333	11.3	11.66667
	DDT-p,p'	4.1	4.633333	4.633333	4.1	4.633333	4.633333
Sta. 48	1,2,3,4,6,7,8-HpCDD		0.00006	0.000227		7.33E-05	0.000227
	1,2,3,4,6,7,8-HpCDF		0	0.00009		4.33E-05	0.000103
	1,2,3,4,7,8,9-HpCDF		0	0		4.33E-05	0.00003
	1,2,3,4,7,8-HxCDD		0	0.000107		0.00003	0.000117
	1,2,3,4,7,8-HxCDF		0.00001	0.00005		2.33E-05	0.00006
	1,2,3,6,7,8-HxCDD		0.00006	0.000133		0.00006	0.000133
	1,2,3,6,7,8-HxCDF		0.00002	4.33E-05		0.00002	5.33E-05
	1,2,3,7,8,9-HxCDD		1.33E-05	0.00003		3.33E-05	0.00004
	1,2,3,7,8,9-HxCDF		0	0		0.00002	1.67E-05
	1,2,3,7,8-PeCDD		0.00003	0.000223		4.67E-05	0.000223

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
1,2,3,7,8-PeCDF		0.00011	0.00016		0.00011	0.000167
1,2,4-Trichlorobenzene		0	0		4.933333	17.83333
1,2-Diphenylhydrazine		0	0		4.933333	17.83333
2,3,4,6,7,8-HxCDF		0.00001	0.00017		2.33E-05	0.00017
2,3,4,6-Tetrachlorophenol		0	0		197.6667	713.6667
2,3,4,7,8-PeCDF		0.00015	0.000193		0.00015	0.000193
2,3,7,8-TCDD		1.33E-05	0		0.00003	0.00005
2,3,7,8-TCDF		0.00068	0.00077		0.00068	0.00077
2,4,5-Trichlorophenol		0	0		197.6667	713.6667
2,4,6-Trichlorophenol		0	0		197.6667	713.6667
2,4-Dichlorophenol		0	0		197.6667	713.6667
2,4-Dimethylphenol		0	0		494.6667	1785
2,4-Dinitrotoluene		0	0		9.933333	35.7
2,6-Dinitrotoluene		0	0		19.76667	71.36667
2-Chloronaphthalene		0	0		9.933333	35.7
2-Chlorophenol		0	0		197.6667	713.6667
3,4,5-Trichloroguaiacol		0	0		494.6667	1785
3,4,6-Trichloroguaiacol		0	0		197.6667	713.6667
3,4-Dichloroguaiacol		0	0		494.6667	1785
4,5,6-Trichloroguaiacol		0	0		494.6667	1785
4,5-Dichloroguaiacol		0	0		494.6667	1785
4,6-Dichloroguaiacol		0	0		494.6667	1785
4-Bromophenyl-Phenylether		0	0		4.933333	17.83333
4-Chloro-3-methylphenol		0	0		197.6667	713.6667
4-Chloroguaiacol		0	0		494.6667	1785
4-Chlorophenyl-Phenylether		0	0		4.933333	17.83333
9H-Fluorene		0	0		4.933333	17.83333
Acenaphthene		0	0		9.933333	35.7
Acenaphthylene		0	0		4.933333	17.83333
Aldrin		0	0		1.9	1.933333
Alpha-BHC		0	0		1.9	1.933333
Alpha-Chlordene		0	0		1.9	1.933333
Aluminum		366.6667	0		1033.333	1000
Anthracene		0	0		4.933333	17.83333
Antimony		0	0		50	50
Arsenic		819.3333	890.6667		819.3333	890.6667
Barium		0	0		200	200
Benzene, 1,2-dichloro-		0	0		4.933333	17.83333
Benzene, 1,3-dichloro-		0	0		4.933333	17.83333
Benzene, 1,4-dichloro-		0	0		4.933333	17.83333
Benzo(a)anthracene		0	0		18.13333	17.83333
Benzo(a)pyrene		0	0		18.13333	17.83333
Benzo(g,h,i)perylene		0	0		36.33333	35.7
Benzo[b]Fluoranthene		0	0		18.13333	17.83333
Benzo[k]fluoranthene		0	0		18.13333	17.83333
Beryllium		0	0		4	4

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
Beta-BHC		0	0		1.9	1.933333
bis(2-Chloroisopropyl)ether		0	0		9.933333	35.7
Cadmium		9	127		9	127
Chromium		0	73.33333		100	106.6667
Chrysene		0	0		18.13333	17.83333
cis-Chlordane (alpha-Chlordane)		0	0		1.9	1.933333
cis-Nonachlor		0	0		1.9	1.933333
Cobalt		4.2	83.66667		4.2	83.66667
Copper		755.6667	1273.333		755.6667	1273.333
DDMU		0	0		1.9	1.933333
Delta-BHC		0	0		1.9	1.933333
Dibenz[a,h]anthracene		0	0		36.33333	35.7
Dibenzofuran		0	0		4.933333	17.83333
Endosulfan Sulfate		#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Fluoranthene		0	0		9.933333	35.7
Gamma-Chlordane		0	0		1.9	1.933333
gamma-Chlordene		0	0		1.9	1.933333
Heptachlor		0	0		1.9	1.933333
Heptachlor Epoxide		0	0		1.9	1.933333
Hexachlorobenzene		2.8	3.366667		2.8	3.366667
Hexachlorobutadiene		0	0		4.933333	17.83333
Hexachloroethane		0	0		4.933333	17.83333
Indeno(1,2,3-cd)pyrene		0	0		36.33333	35.7
Lead		0	11.33333		10	11.33333
Lindane		0	0		1.9	1.933333
Manganese		97.33333	396		97.33333	396
Mercury		0	0		100	99
Mirex		0	0		1.9	1.933333
Naphthalene		0	0		33.8	48.23333
Naphthalene, 1-methyl-		0	0		4.933333	17.83333
Naphthalene, 2-methyl-		0	0		5.433333	18.4
Nickel		10.33333	0		30.33333	30
Nitrobenzene		0	0		4.933333	17.83333
n-Nitrosodiphenylamine		#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
OCDD		0.00012	0.000457		0.000153	0.000457
OCDF		0	4.33E-05		6.33E-05	7.33E-05
Oxychlordane		0	0		1.9	1.933333
PCB 105		0.234667	0.243333		0.234667	0.243333
PCB 114		0.021067	0.022		0.021067	0.022
PCB 118		0.542	0.553667		0.542	0.553667
PCB 123		0.012	0.009507		0.012	0.009507
PCB 126		0.003033	0.001017		0.003033	0.002
PCB 156		0.0402	0.0422		0.0402	0.0422
PCB 157		0.010667	0.012267		0.010667	0.012267
PCB 167		0.029833	0.028567		0.029833	0.028567
PCB 169		0	0		0.001157	0.00109

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station		Detection Limits					
		DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
	PCB 170		0.085833	0.088433		0.085833	0.088433
	PCB 180		0.265333	0.249667		0.265333	0.249667
	PCB 189		0.00272	0.00181		0.00272	0.002627
	Pentachloroanisol		0.26	0.366667		1.526667	1.666667
	Pentachlorophenol		0	0		197.6667	713.6667
	Phenanthrene		0	0		6	18.16667
	Phenol		0	0		197.6667	713.6667
	Pyrene		0	0		36.33333	35.7
	Retene		0	0		36.33333	35.7
	Selenium		383.3333	568.3333		383.3333	568.3333
	Silver		0	0		100	100
	Tetrachloroguaiacol		0	0		197.6667	713.6667
	Thallium		0	0		50	50
	Toxaphene		0	0		57	57.66667
	trans-Nonachlor		3.3	3.933333		3.3	3.933333
	Vanadium		0	13		10	13
	Zinc		6886.667	25366.67		6886.667	25366.67
	Aroclor 1016		0	0		19	19.33333
	Aroclor 1221		0	0		19	19.33333
	Aroclor 1232		0	0		19	19.33333
	Aroclor 1242		0	0		19	19.33333
	Aroclor 1248		0	0		19	19.33333
	Aroclor 1254		17	17.66667		17	17.66667
	Aroclor 1260		0	0		19	19.33333
	PCB 077		0.011533	0.011973		0.011533	0.011973
	DDD-o,p'		0	0		1.9	1.933333
	DDE-o,p'		0	0		1.9	1.933333
	DDT-o,p'		0	0		1.9	1.933333
	DDD-p,p'		2.566667	3.466667		2.566667	3.466667
	DDE-p,p'		16.33333	17.66667		16.33333	17.66667
	DDT-p,p'		6.566667	7.1		6.566667	7.1
Sta. 51	1,2,3,4,6,7,8-HpCDD		0.000117	0.000183		0.000117	0.000183
	1,2,3,4,6,7,8-HpCDF		0.00003	5.67E-05		0.00004	8.67E-05
	1,2,3,4,7,8,9-HpCDF		3.67E-05	0.00005		4.67E-05	0.00008
	1,2,3,4,7,8-HxCDD		1.33E-05	1.67E-05		0.00002	4.33E-05
	1,2,3,4,7,8-HxCDF		1.33E-05	0.00004		3.67E-05	5.67E-05
	1,2,3,6,7,8-HxCDD		0.0001	3.33E-05		0.0001	5.67E-05
	1,2,3,6,7,8-HxCDF		4.67E-05	4.33E-05		4.67E-05	0.00006
	1,2,3,7,8,9-HxCDD		0.00002	8.67E-05		2.67E-05	8.67E-05
	1,2,3,7,8,9-HxCDF		0.00002	5.33E-05		3.33E-05	0.00007
	1,2,3,7,8-PeCDD		0.00012	9.33E-05		0.00012	0.000103
	1,2,3,7,8-PeCDF		0.000127	0.000153		0.000127	0.000153
	1,2,4-Trichlorobenzene		0	0		9.633333	9.533333
	1,2-Diphenylhydrazine		0	0		9.633333	9.533333
	2,3,4,6,7,8-HxCDF		6.33E-05	2.67E-05		0.00007	0.00005
	2,3,4,6-Tetrachlorophenol		0	0		384.6667	380

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
2,3,4,7,8-PeCDF		5.67E-05	0.000193		0.00007	0.000193
2,3,7,8-TCDD		0.00004	0.00001		0.00004	0.00003
2,3,7,8-TCDF		0.000673	0.0008		0.000673	0.0008
2,4,5-Trichlorophenol		0	0		384.6667	380
2,4,6-Trichlorophenol		0	0		384.6667	380
2,4-Dichlorophenol		0	0		384.6667	380
2,4-Dimethylphenol		0	0		962	950.3333
2,4-Dinitrotoluene		0	0		19.2	18.96667
2,6-Dinitrotoluene		0	0		38.46667	38
2-Chloronaphthalene		0	0		19.2	18.96667
2-Chlorophenol		0	0		384.6667	380
3,4,5-Trichloroguaiacol		0	0		962	950.3333
3,4,6-Trichloroguaiacol		0	0		384.6667	380
3,4-Dichloroguaiacol		0	0		962	950.3333
4,5,6-Trichloroguaiacol		0	0		962	950.3333
4,5-Dichloroguaiacol		0	0		962	950.3333
4,6-Dichloroguaiacol		0	0		962	950.3333
4-Bromophenyl-Phenylether		0	0		9.633333	9.533333
4-Chloro-3-methylphenol		0	0		384.6667	380
4-Chloroguaiacol		0	0		962	950.3333
4-Chlorophenyl-Phenylether		0	0		9.633333	9.533333
9H-Fluorene		0	0		9.633333	9.533333
Acenaphthene		0	7.833333		19.2	20.5
Acenaphthylene		0	0		9.633333	9.533333
Aldrin		0	0		1.833333	1.866667
Alpha-BHC		0	0		1.833333	1.866667
Alpha-Chlordene		0	0		1.833333	1.866667
Aluminum		1233.333	0		1566.667	1000
Anthracene		0	0		9.633333	9.533333
Antimony		0	0		50	50
Arsenic		849.3333	805.6667		849.3333	805.6667
Barium		0	0		200	200
Benzene, 1,2-dichloro-		0	0		9.633333	9.533333
Benzene, 1,3-dichloro-		0	0		9.633333	9.533333
Benzene, 1,4-dichloro-		0	0		9.633333	9.533333
Benzo(a)anthracene		0	0		9.633333	9.533333
Benzo(a)pyrene		0	0		9.366667	9.533333
Benzo(g,h,i)perylene		0	0		18.66667	18.96667
Benzo[b]Fluoranthene		0	0		9.366667	9.533333
Benzo[k]fluoranthene		0	0		9.366667	9.533333
Beryllium		0	0		4	4
Beta-BHC		0	0		1.833333	1.866667
bis(2-Chloroisopropyl)ether		0	0		19.2	18.96667
Cadmium		10.2	156.6667		10.2	156.6667
Chromium		0	123.3333		100	123.3333
Chrysene		0	0		9.633333	9.533333

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
cis-Chlordane (alpha-Chlordane)		0	0		1.833333	1.866667
cis-Nonachlor		0	0		1.833333	1.866667
Cobalt		0	82.66667		1	82.66667
Copper		779	1443.333		779	1443.333
DDMU		0	0		1.833333	1.866667
Delta-BHC		0	0		1.833333	1.866667
Dibenz[a,h]anthracene		0	0		18.66667	18.96667
Dibenzofuran		0	0		9.633333	9.533333
Endosulfan Sulfate		0	0		1.833333	1.866667
Fluoranthene		0	0		19.2	18.96667
Gamma-Chlordane		0	0		1.833333	1.866667
gamma-Chlordene		0	0		1.833333	1.866667
Heptachlor		0	0		1.833333	1.866667
Heptachlor Epoxide		0	0		1.833333	1.866667
Hexachlorobenzene		0	0		1.833333	1.866667
Hexachlorobutadiene		0	0		9.633333	9.533333
Hexachloroethane		0	0		9.633333	9.533333
Indeno(1,2,3-cd)pyrene		0	0		18.66667	18.96667
Lead		0	17.66667		10	17.66667
Lindane		0	0		1.833333	1.866667
Manganese		90.66667	387		90.66667	387
Mercury		75	0		150.3333	99.33333
Mirex		0	0		1.833333	1.866667
Naphthalene		0	0		52.5	70.43333
Naphthalene, 1-methyl-		0	0		9.633333	9.533333
Naphthalene, 2-methyl-		9.066667	15.63333		12.3	15.63333
Nickel		42.33333	38.66667		42.33333	38.66667
Nitrobenzene		0	0		9.633333	9.533333
n-Nitrosodiphenylamine		#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
OCDD		0.000187	0.000413		0.000197	0.000413
OCDF		0.00007	0.000123		0.000103	0.000173
Oxychlordane		0	0		1.833333	1.866667
PCB 105		0.213667	0.257667		0.213667	0.257667
PCB 114		0.019733	0.0221		0.019733	0.0221
PCB 118		0.495	0.586667		0.495	0.586667
PCB 123		0.009693	0.01063		0.009693	0.01063
PCB 126		0.002363	0.00231		0.002633	0.002483
PCB 156		0.039	0.046533		0.039	0.046533
PCB 157		0.010887	0.012027		0.010887	0.012027
PCB 167		0.0277	0.030167		0.0277	0.030167
PCB 169		0	0		0.00109	0.001037
PCB 170		0.071533	0.077333		0.071533	0.077333
PCB 180		0.246333	0.256667		0.246333	0.256667
PCB 189		0.002067	0.002923		0.0024	0.002923
Pentachloroanisol		0	0.313333		1.833333	1.546667
Pentachlorophenol		0	0		384.6667	380

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station		Detection Limits						
		DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody	
	Phenanthrene		0	0		9.633333	9.533333	
	Phenol		0	0		384.6667	380	
	Pyrene		0	0		19.2	18.96667	
	Retene		0	0		19.2	18.96667	
	Selenium		320	525.6667		320	525.6667	
	Silver		0	0		100	100	
	Tetrachloroguaiacol		0	0		384.6667	380	
	Thallium		0	0		50	50	
	Toxaphene		0	0		55.33333	55.66667	
	trans-Nonachlor		2.7	3.6		2.7	3.6	
	Vanadium		0	8.333333		10	11.66667	
	Zinc		6363.333	26633.33		6363.333	26633.33	
	Aroclor 1016		0	0		18.33333	18.66667	
	Aroclor 1221		0	0		18.33333	18.66667	
	Aroclor 1232		0	0		18.33333	18.66667	
	Aroclor 1242		0	0		18.33333	18.66667	
	Aroclor 1248		0	0		18.33333	18.66667	
	Aroclor 1254		15.33333	18.33333		15.33333	18.33333	
	Aroclor 1260		0	0		18.33333	18.66667	
	PCB 077		0.0123	0.0157		0.0123	0.0157	
	DDD-o,p'		0	0		1.833333	1.866667	
	DDE-o,p'		0	0		1.833333	1.866667	
	DDT-o,p'		0	0		1.833333	1.866667	
	DDD-p,p'		3	2.533333		3	3.133333	
	DDE-p,p'		13.33333	16.66667		13.33333	16.66667	
	DDT-p,p'		4.966667	5.1		4.966667	5.1	
	Sta. 56	1,2,3,4,6,7,8-HpCDD		0.000173	0.000113		0.000173	0.000117
		1,2,3,4,6,7,8-HpCDF		0	6.33E-05		0.00002	6.33E-05
1,2,3,4,7,8,9-HpCDF			1.33E-05	0		0.00002	1.33E-05	
1,2,3,4,7,8-HxCDD			0	1.67E-05		0.00001	2.33E-05	
1,2,3,4,7,8-HxCDF			0	0.00003		1.33E-05	3.67E-05	
1,2,3,6,7,8-HxCDD			0.00003	6.33E-05		3.67E-05	6.67E-05	
1,2,3,6,7,8-HxCDF			3.67E-05	0.00003		3.67E-05	0.00003	
1,2,3,7,8,9-HxCDD			0.00002	0		2.67E-05	1.33E-05	
1,2,3,7,8,9-HxCDF			0	3.33E-06		1.33E-05	1.67E-05	
1,2,3,7,8-PeCDD			0.00003	0.00012		0.00004	0.00012	
1,2,3,7,8-PeCDF			0.00006	9.33E-05		6.67E-05	9.33E-05	
1,2,4-Trichlorobenzene			0	0		9.566667	9.1	
1,2-Diphenylhydrazine			0	0		9.566667	9.1	
2,3,4,6,7,8-HxCDF			0.00003	2.67E-05		3.33E-05	3.33E-05	
2,3,4,6-Tetrachlorophenol			0	0		383.3333	364.6667	
2,3,4,7,8-PeCDF			0.000127	0.00016		0.000127	0.00016	
2,3,7,8-TCDD			0.00001	0		2.33E-05	1.33E-05	
2,3,7,8-TCDF			0.00056	0.000877		0.00056	0.000877	
2,4,5-Trichlorophenol			0	0		383.3333	364.6667	
2,4,6-Trichlorophenol			0	0		383.3333	364.6667	

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
2,4-Dichlorophenol		0	0		383.3333	364.6667
2,4-Dimethylphenol		0	0		958	911.6667
2,4-Dinitrotoluene		0	0		19.16667	18.23333
2,6-Dinitrotoluene		0	0		38.33333	36.46667
2-Chloronaphthalene		0	0		19.16667	18.23333
2-Chlorophenol		0	0		383.3333	364.6667
3,4,5-Trichloroguaiacol		0	0		958	911.6667
3,4,6-Trichloroguaiacol		0	0		383.3333	364.6667
3,4-Dichloroguaiacol		0	0		958	911.6667
4,5,6-Trichloroguaiacol		0	0		958	911.6667
4,5-Dichloroguaiacol		0	0		958	911.6667
4,6-Dichloroguaiacol		0	0		958	911.6667
4-Bromophenyl-Phenylether		0	0		9.566667	9.1
4-Chloro-3-methylphenol		0	0		383.3333	364.6667
4-Chloroguaiacol		0	0		958	911.6667
4-Chlorophenyl-Phenylether		0	0		9.566667	9.1
9H-Fluorene		0	0		9.566667	9.1
Acenaphthene		0	0		19.16667	18.23333
Acenaphthylene		0	0		9.566667	9.1
Aldrin		0	0		1.966667	2
Alpha-BHC		0	0		1.966667	2
Alpha-Chlordene		0	0		1.966667	2
Aluminum		0	466.6667		1000	1133.333
Anthracene		0	0		9.566667	9.1
Antimony		0	0		50	50
Arsenic		791.6667	586		791.6667	586
Barium		0	0		200	200
Benzene, 1,2-dichloro-		0	0		9.566667	9.1
Benzene, 1,3-dichloro-		0	0		9.566667	9.1
Benzene, 1,4-dichloro-		0	0		9.566667	9.1
Benzo(a)anthracene		0	0		9.566667	9.1
Benzo(a)pyrene		0	0		9.566667	9.1
Benzo(g,h,i)perylene		0	0		19.16667	18.23333
Benzo[b]Fluoranthene		0	0		9.566667	9.1
Benzo[k]fluoranthene		0	0		9.566667	9.1
Beryllium		0	0		4	4
Beta-BHC		0	0		1.966667	2
bis(2-Chloroisopropyl)ether		0	0		19.16667	18.23333
Cadmium		10.06667	104.6667		10.06667	104.6667
Chromium		183.3333	170		183.3333	170
Chrysene		0	0		9.566667	9.1
cis-Chlordane (alpha-Chlordane)		0	0.466667		1.966667	1.8
cis-Nonachlor		0.366667	0.633333		1.7	1.966667
Cobalt		145.6667	150.3333		145.6667	150.3333
Copper		1291	2063.333		1291	2063.333
DDMU		0.8	0.533333		2.1	1.866667

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
Delta-BHC		0	0		1.966667	2
Dibenz[a,h]anthracene		0	0		19.16667	18.23333
Dibenzofuran		0	0		9.566667	9.1
Endosulfan Sulfate		#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Fluoranthene		0	0		19.16667	18.23333
Gamma-Chlordane		0	0		1.966667	2
gamma-Chlordene		0	0		1.966667	2
Heptachlor		0	0		1.966667	2
Heptachlor Epoxide		#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Hexachlorobenzene		1.633333	2.133333		1.633333	2.133333
Hexachlorobutadiene		0	0		9.566667	9.1
Hexachloroethane		0	0		9.566667	9.1
Indeno(1,2,3-cd)pyrene		0	0		19.16667	18.23333
Lead		65.33333	85.33333		68.66667	85.33333
Lindane		0	0		1.966667	2
Manganese		105.3333	356		105.3333	356
Mercury		307	95.33333		307	95.33333
Mirex		0	0		1.966667	2
Naphthalene		0	0		31.16667	21.43333
Naphthalene, 1-methyl-		0	0		9.566667	9.1
Naphthalene, 2-methyl-		0	0		9.566667	9.1
Nickel		326.6667	532.3333		326.6667	532.3333
Nitrobenzene		0	0		9.566667	9.1
n-Nitrosodiphenylamine		#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
OCDD		0.000483	0.000433		0.000483	0.000433
OCDF		5.67E-05	0.00007		6.67E-05	7.33E-05
Oxychlordane		0	0		1.966667	2
PCB 105		0.189667	0.356		0.189667	0.356
PCB 114		0.016967	0.033533		0.016967	0.033533
PCB 118		0.413667	0.784667		0.413667	0.784667
PCB 123		0.01036	0.0163		0.01036	0.0163
PCB 126		0	0.0028		0.00199	0.003427
PCB 156		0.044133	0.077233		0.044133	0.077233
PCB 157		0.01183	0.022267		0.01183	0.022267
PCB 167		0.0246	0.0417		0.0246	0.0417
PCB 169		0	0		0.001997	0.001793
PCB 170		0.098767	0.155333		0.098767	0.155333
PCB 180		0.309	0.499333		0.309	0.499333
PCB 189		0.001887	0.005673		0.00282	0.005673
Pentachloroanisol		0	0		1.966667	2
Pentachlorophenol		0	0		383.3333	364.6667
Phenanthrene		0	0		9.566667	9.1
Phenol		0	0		383.3333	373.6667
Pyrene		0	0		19.16667	18.23333
Retene		0	0		19.16667	18.23333
Selenium		306.6667	563.6667		306.6667	563.6667

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
Silver		0	0		100	100
Tetrachloroguaiacol		0	0		383.3333	364.6667
Thallium		0	0		50	50
Toxaphene		0	0		59	59.33333
trans-Nonachlor		1.9	1.733333		1.9	2.4
Vanadium		0	32.66667		10	32.66667
Zinc		6303.333	30366.67		6303.333	30366.67
Aroclor 1016		0	0		19.66667	20
Aroclor 1221		0	0		19.66667	20
Aroclor 1232		0	0		19.66667	20
Aroclor 1242		0	0		19.66667	20
Aroclor 1248		0	0		19.66667	20
Aroclor 1254		16.33333	19.33333		16.33333	19.33333
Aroclor 1260		0	0		19.66667	20
PCB 077		0.0058	0.011733		0.006053	0.011733
DDD-o,p'		0	0		1.966667	2
DDE-o,p'		0	0.466667		1.966667	1.8
DDT-o,p'		0	0		1.966667	2
DDD-p,p'		1.033333	2.333333		1.7	3
DDE-p,p'		10.86667	19.66667		10.86667	19.66667
DDT-p,p'		2.366667	4.4		3.033333	4.4
Sta. 62	1,2,3,4,6,7,8-HpCDD	0.00005	8.33E-05		5.67E-05	0.000103
	1,2,3,4,6,7,8-HpCDF	1.33E-05	1.33E-05		1.67E-05	3.67E-05
	1,2,3,4,7,8,9-HpCDF	0	0		1.67E-05	2.67E-05
	1,2,3,4,7,8-HxCDD	1.67E-05	0		0.00002	2.67E-05
	1,2,3,4,7,8-HxCDF	0.00001	0.00001		0.00002	4.67E-05
	1,2,3,6,7,8-HxCDD	4.67E-05	0.00005		0.00005	0.00006
	1,2,3,6,7,8-HxCDF	3.33E-05	0.00001		3.33E-05	4.67E-05
	1,2,3,7,8,9-HxCDD	2.33E-05	0.00002		2.67E-05	4.33E-05
	1,2,3,7,8,9-HxCDF	0	2.33E-05		1.67E-05	4.33E-05
	1,2,3,7,8-PeCDD	0.00006	2.67E-05		6.33E-05	4.33E-05
	1,2,3,7,8-PeCDF	0.000127	3.67E-05		0.000127	6.67E-05
	1,2,4-Trichlorobenzene	0	0		9.833333	9.466667
	1,2-Diphenylhydrazine	0	0		9.833333	9.466667
	2,3,4,6,7,8-HxCDF	1.33E-05	0.00001		2.67E-05	4.67E-05
	2,3,4,6-Tetrachlorophenol	0	0		393	379
	2,3,4,7,8-PeCDF	0.00016	9.67E-05		0.00016	0.000113
	2,3,7,8-TCDD	0	0		1.67E-05	1.67E-05
	2,3,7,8-TCDF	0.00058	0.000633		0.00058	0.000633
	2,4,5-Trichlorophenol	0	0		393	379
	2,4,6-Trichlorophenol	0	0		393	379
	2,4-Dichlorophenol	0	0		393	379
	2,4-Dimethylphenol	0	0		983	947.6667
	2,4-Dinitrotoluene	0	0		19.66667	18.93333
	2,6-Dinitrotoluene	0	0		39.3	37.9
	2-Chloronaphthalene	0	0		19.66667	18.93333

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
2-Chlorophenol		0	0		393	379
3,4,5-Trichloroguaiacol		0	0		983	947.6667
3,4,6-Trichloroguaiacol		0	0		393	379
3,4-Dichloroguaiacol		0	0		983	947.6667
4,5,6-Trichloroguaiacol		0	0		983	947.6667
4,5-Dichloroguaiacol		0	0		983	947.6667
4,6-Dichloroguaiacol		0	0		983	947.6667
4-Bromophenyl-Phenylether		0	0		9.833333	9.466667
4-Chloro-3-methylphenol		0	0		393	379
4-Chloroguaiacol		0	0		983	947.6667
4-Chlorophenyl-Phenylether		0	0		9.833333	9.466667
9H-Fluorene		0	0		9.833333	9.466667
Acenaphthene		0	0		19.66667	18.93333
Acenaphthylene		0	0		9.833333	9.466667
Aldrin		0	0		1.933333	1.933333
Alpha-BHC		0	0		1.933333	1.933333
Alpha-Chlordene		0	0		1.933333	1.933333
Aluminum		430	900		1096.667	1233.333
Anthracene		0	0		9.833333	9.466667
Antimony		0	0		50	50
Arsenic		936.6667	862		936.6667	862
Barium		0	0		200	200
Benzene, 1,2-dichloro-		0	0		9.833333	9.466667
Benzene, 1,3-dichloro-		0	0		9.833333	9.466667
Benzene, 1,4-dichloro-		0	0		9.833333	9.466667
Benzo(a)anthracene		0	0		9.733333	9.633333
Benzo(a)pyrene		0	0		9.733333	9.633333
Benzo(g,h,i)perylene		0	0		19.46667	19.26667
Benzo[b]Fluoranthene		0	0		9.733333	9.633333
Benzo[k]fluoranthene		0	0		9.733333	9.633333
Beryllium		0	0		4	4
Beta-BHC		0	0		1.933333	1.933333
bis(2-Chloroisopropyl)ether		0	0		19.66667	18.93333
Cadmium		11.66667	136.3333		11.66667	136.3333
Chromium		310	486.6667		343.3333	486.6667
Chrysene		0	0		9.733333	9.633333
cis-Chlordane (alpha-Chlordane)		0	0		1.933333	1.933333
cis-Nonachlor		0.433333	0		1.7	1.933333
Cobalt		3.833333	117		3.833333	117
Copper		657.6667	1460		657.6667	1460
DDMU		0.466667	0		1.733333	1.933333
Delta-BHC		0	0		1.933333	1.933333
Dibenz[a,h]anthracene		0	0		19.46667	19.26667
Dibenzofuran		0	0		9.833333	9.466667
Endosulfan Sulfate		0	0		1.8	1.933333
Fluoranthene		0	0		19.66667	18.93333

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
Gamma-Chlordane		0	0		1.933333	1.933333
gamma-Chlordene		0	0		1.933333	1.933333
Heptachlor		0	0		1.933333	1.933333
Heptachlor Epoxide		0	0		1.8	1.933333
Hexachlorobenzene		1.933333	0		2.533333	1.933333
Hexachlorobutadiene		0	0		9.833333	9.466667
Hexachloroethane		0	0		9.833333	9.466667
Indeno(1,2,3-cd)pyrene		0	0		19.46667	19.26667
Lead		0	0		10	10
Lindane		0	0		1.933333	1.933333
Manganese		85	352.6667		85	352.6667
Mercury		0	0		114.3333	108
Mirex		0	0		1.933333	1.933333
Naphthalene		0	0		31.26667	48.36667
Naphthalene, 1-methyl-		0	0		9.833333	9.466667
Naphthalene, 2-methyl-		0	0		10.26667	9.466667
Nickel		0	526.6667		30	526.6667
Nitrobenzene		0	0		9.833333	9.466667
n-Nitrosodiphenylamine		#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
OCDD		3.33E-05	0.000273		4.67E-05	0.000273
OCDF		0	0.00001		3.33E-05	5.33E-05
Oxychlordane		0	0		1.933333	1.933333
PCB 105		0.228	0.244		0.228	0.244
PCB 114		0.0223	0.0214		0.0223	0.0214
PCB 118		0.525333	0.545333		0.525333	0.545333
PCB 123		0.011833	0.01074		0.011833	0.01074
PCB 126		0.002443	0.002173		0.002443	0.002387
PCB 156		0.039133	0.0436		0.039133	0.0436
PCB 157		0.012767	0.013067		0.012767	0.013067
PCB 167		0.0275	0.028733		0.0275	0.028733
PCB 169		0	0		0.00132	0.001253
PCB 170		0.0694	0.0697		0.0694	0.0697
PCB 180		0.243333	0.241667		0.243333	0.241667
PCB 189		0.001717	0.000963		0.00205	0.00163
Pentachloroanisol		0	0		1.933333	1.933333
Pentachlorophenol		0	0		393	379
Phenanthrene		0	0		9.833333	9.466667
Phenol		0	0		393	379
Pyrene		0	0		19.46667	19.26667
Retene		0	0		19.46667	19.26667
Selenium		346.6667	578		346.6667	578
Silver		0	0		100	100
Tetrachloroguaiacol		0	0		393	379
Thallium		0	0		50	50
Toxaphene		0	0		58	58
trans-Nonachlor		2.7	3.2		2.7	3.2

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
	Vanadium		0 15		10 15	
	Zinc		6336.667 20100		6336.667 20100	
	Aroclor 1016		0 0		19.33333 19.33333	
	Aroclor 1221		0 0		19.33333 19.33333	
	Aroclor 1232		0 0		19.33333 19.33333	
	Aroclor 1242		0 0		19.33333 19.33333	
	Aroclor 1248		0 0		19.33333 19.33333	
	Aroclor 1254		17.33333 17.66667		17.33333 17.66667	
	Aroclor 1260		0 0		19.33333 19.33333	
	PCB 077		0.011057 0.011733		0.011057 0.011733	
	DDD-o,p'		0 0		1.933333 1.933333	
	DDE-o,p'		0.466667 0		1.733333 1.933333	
	DDT-o,p'		0 0		1.933333 1.933333	
	DDD-p,p'		2.166667 2.633333		2.166667 2.633333	
	DDE-p,p'		11.26667 14		11.26667 14	
	DDT-p,p'		4.6 5.366667		4.6 5.366667	
Sta. 63	1,2,3,4,6,7,8-HpCDD		2.33E-05 0.0001		0.00005 0.0001	
	1,2,3,4,6,7,8-HpCDF		6.67E-06 0.00001		4.33E-05 0.00002	
	1,2,3,4,7,8,9-HpCDF		0 0		0.00004 1.33E-05	
	1,2,3,4,7,8-HxCDD		2.67E-05 6.67E-06		3.33E-05 1.33E-05	
	1,2,3,4,7,8-HxCDF		0 0.00001		2.67E-05 1.67E-05	
	1,2,3,6,7,8-HxCDD		9.67E-05 0.00002		9.67E-05 2.67E-05	
	1,2,3,6,7,8-HxCDF		0.00001 0.00002		3.33E-05 2.33E-05	
	1,2,3,7,8,9-HxCDD		1.33E-05 2.33E-05		3.33E-05 2.67E-05	
	1,2,3,7,8,9-HxCDF		0 0		2.67E-05 0.00001	
	1,2,3,7,8-PeCDD		2.67E-05 0		0.00004 0.00001	
	1,2,3,7,8-PeCDF		0.000123 8.67E-05		0.000123 0.00009	
	1,2,4-Trichlorobenzene		0 0		8.9 9.566667	
	1,2-Diphenylhydrazine		0 0		8.9 9.566667	
	2,3,4,6,7,8-HxCDF		1.33E-05 0.00001		3.67E-05 1.67E-05	
	2,3,4,6-Tetrachlorophenol		0 0		356 382	
	2,3,4,7,8-PeCDF		0.000167 0.00017		0.000167 0.00017	
	2,3,7,8-TCDD		0 0		0.00002 1.33E-05	
	2,3,7,8-TCDF		0.000613 0.000677		0.000613 0.000677	
	2,4,5-Trichlorophenol		0 0		356 382	
	2,4,6-Trichlorophenol		0 0		356 382	
	2,4-Dichlorophenol		0 0		356 382	
	2,4-Dimethylphenol		0 0		890 955	
	2,4-Dinitrotoluene		0 0		17.8 19.1	
	2,6-Dinitrotoluene		0 0		35.6 38.2	
	2-Chloronaphthalene		0 0		17.8 19.1	
	2-Chlorophenol		0 0		356 382	
	3,4,5-Trichloroguaiacol		0 0		890 955	
	3,4,6-Trichloroguaiacol		0 0		356 382	
	3,4-Dichloroguaiacol		0 0		890 955	
	4,5,6-Trichloroguaiacol		0 0		890 955	

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
4,5-Dichloroguaiacol		0	0		890	955
4,6-Dichloroguaiacol		0	0		890	955
4-Bromophenyl-Phenylether		0	0		8.9	9.566667
4-Chloro-3-methylphenol		0	0		356	382
4-Chloroguaiacol		0	0		890	955
4-Chlorophenyl-Phenylether		0	0		8.9	9.566667
9H-Fluorene		0	0		8.9	9.566667
Acenaphthene		0	0		17.8	19.1
Acenaphthylene		0	0		8.9	9.566667
Aldrin		0	0		1.833333	1.9
Alpha-BHC		0	0		1.833333	1.9
Alpha-Chlordene		0	0		1.833333	1.9
Aluminum		390	0		1056.667	1000
Anthracene		0	0		8.9	9.566667
Antimony		0	0		50	50
Arsenic		895.6667	786		895.6667	786
Barium		0	0		200	200
Benzene, 1,2-dichloro-		0	0		8.9	9.566667
Benzene, 1,3-dichloro-		0	0		8.9	9.566667
Benzene, 1,4-dichloro-		0	0		8.9	9.566667
Benzo(a)anthracene		0	0		8.9	9.566667
Benzo(a)pyrene		0	0		9.866667	9.566667
Benzo(g,h,i)perylene		0	0		19.66667	19.16667
Benzo[b]Fluoranthene		0	0		9.866667	9.566667
Benzo[k]fluoranthene		0	0		9.866667	9.566667
Beryllium		0	0		4	4
Beta-BHC		0	0		1.833333	1.9
bis(2-Chloroisopropyl)ether		0	0		17.8	19.1
Cadmium		9.6	127.6667		9.6	127.6667
Chromium		310	86.66667		343.3333	120
Chrysene		0	0		8.9	9.566667
cis-Chlordane (alpha-Chlordane)		0	0		1.833333	1.9
cis-Nonachlor		0	0		1.833333	1.9
Cobalt		3.133333	76.66667		3.466667	76.66667
Copper		698	1253.333		698	1253.333
DDMU		0	0.933333		1.833333	2.2
Delta-BHC		0	0		1.833333	1.9
Dibenz[a,h]anthracene		0	0		19.66667	19.16667
Dibenzofuran		0	0		8.9	9.566667
Endosulfan Sulfate		0	0		1.833333	1.9
Fluoranthene		0	0		17.8	19.1
Gamma-Chlordane		0	0		1.833333	1.9
gamma-Chlordene		0	0		1.833333	1.9
Heptachlor		0	0		1.833333	1.9
Heptachlor Epoxide		0	0		1.833333	1.9
Hexachlorobenzene		0.766667	0		1.966667	1.9

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
Hexachlorobutadiene		0	0		8.9	9.566667
Hexachloroethane		0	0		8.9	9.566667
Indeno(1,2,3-cd)pyrene		0	0		19.66667	19.16667
Lead		0	12		10	12
Lindane		0	0		1.833333	1.9
Manganese		86.66667	370.6667		86.66667	370.6667
Mercury		48.33333	0		114	103.3333
Mirex		0	0		1.833333	1.9
Naphthalene		0	0		51.63333	56.83333
Naphthalene, 1-methyl-		0	0		8.9	9.566667
Naphthalene, 2-methyl-		3.633333	6.666667		9.3	9.9
Nickel		15.66667	39		35.66667	39
Nitrobenzene		0	0		8.9	9.566667
n-Nitrosodiphenylamine		#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
OCDD		0.000343	0.000253		0.000343	0.000253
OCDF		0	6.67E-06		8.33E-05	0.00002
Oxychlorthane		0	0		1.833333	1.9
PCB 105		0.2	0.222667		0.2	0.222667
PCB 114		0.017333	0.020633		0.017333	0.020633
PCB 118		0.467667	0.513667		0.467667	0.513667
PCB 123		0.008333	0.0116		0.008333	0.0116
PCB 126		0.00284	0.00267		0.00284	0.002883
PCB 156		0.038667	0.0392		0.038667	0.0392
PCB 157		0.010417	0.009897		0.010417	0.009897
PCB 167		0.0265	0.026533		0.0265	0.026533
PCB 169		0	0		0.001053	0.001
PCB 170		0.069333	0.063833		0.069333	0.063833
PCB 180		0.237	0.214667		0.237	0.214667
PCB 189		0.002507	0.002537		0.002507	0.002537
Pentachloroanisol		0	0		1.833333	1.9
Pentachlorophenol		0	0		356	382
Phenanthrene		0	0		8.9	9.566667
Phenol		0	0		356	382
Pyrene		0	0		17.8	19.1
Retene		0	0		17.8	19.1
Selenium		346.6667	552		346.6667	552
Silver		0	0		100	100
Tetrachloroguaiacol		0	0		356	382
Thallium		0	0		50	50
Toxaphene		0	0		55.66667	57.33333
trans-Nonachlor		2.6	3.9		2.6	3.9
Vanadium		0	11.66667		10	15
Zinc		6153.333	22200		6153.333	22200
Aroclor 1016		0	0		18.33333	19
Aroclor 1221		0	0		18.33333	19
Aroclor 1232		0	0		18.33333	19

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

		Detection Limits					
		DL=0	DL=0	DL=0	DL=DL	DL=DL	DL=DL
Station		Egg	Fillet+skin	WholeBody	Egg	Fillet+skin	WholeBody
	Aroclor 1242		0	0		18.33333	19
	Aroclor 1248		0	0		18.33333	19
	Aroclor 1254		14.33333	19.33333		14.33333	19.33333
	Aroclor 1260		0	0		18.33333	19
	PCB 077		0.010667	0.0131		0.010667	0.0131
	DDD-o,p'		0	0		1.833333	1.9
	DDE-o,p'		0	0		1.833333	1.9
	DDT-o,p'		0	0		1.833333	1.9
	DDD-p,p'		2.033333	3.633333		2.033333	3.633333
	DDE-p,p'		12	12.33333		12	12.33333
DDT-p,p'		4.066667	6.233333		4.066667	6.233333	
Sta. 94	1,2,3,4,6,7,8-HpCDD	6.7E-05	0.000085	0.000127	7E-05	8.83E-05	0.000127
	1,2,3,4,6,7,8-HpCDF	1.7E-05	1.67E-05	0.00001	5E-05	2.33E-05	2.33E-05
	1,2,3,4,7,8,9-HpCDF	0	3.33E-06	0	4E-05	1.17E-05	1.67E-05
	1,2,3,4,7,8-HxCDD	3.3E-06	0.00002	0	3E-05	2.17E-05	1.33E-05
	1,2,3,4,7,8-HxCDF	0	3.33E-05	0.00002	7E-05	3.33E-05	2.67E-05
	1,2,3,6,7,8-HxCDD	1.3E-05	4.83E-05	4.33E-05	4E-05	5.17E-05	4.67E-05
	1,2,3,6,7,8-HxCDF	6.7E-06	3.67E-05	0	8E-05	3.67E-05	1.67E-05
	1,2,3,7,8,9-HxCDD	1.3E-05	0.00003	3.33E-05	4E-05	3.17E-05	3.67E-05
	1,2,3,7,8,9-HxCDF	0	0	0	7E-05	0.00001	1.67E-05
	1,2,3,7,8-PeCDD	1.7E-05	8.17E-05	0	4E-05	0.000085	0.00002
	1,2,3,7,8-PeCDF	0.00002	0.000147	7.67E-05	5E-05	0.000147	0.00008
	1,2,4-Trichlorobenzene	0	0	0	35.367	12.18333	11.56667
	1,2-Diphenylhydrazine	0	0	0	35.367	12.18333	11.56667
	2,3,4,6,7,8-HxCDF	0.00001	3.33E-05	0.00001	8E-05	3.83E-05	2.33E-05
	2,3,4,6-Tetrachlorophenol	0	0	0	387	487.5	461.3333
	2,3,4,7,8-PeCDF	3.3E-05	0.000163	0.0002	7E-05	0.000163	0.0002
	2,3,7,8-TCDD	1.3E-05	0	2.67E-05	3E-05	1.67E-05	0.00003
	2,3,7,8-TCDF	0.00061	0.000668	0.000723	0.0006	0.000668	0.000723
	2,4,5-Trichlorophenol	0	0	0	387	487.5	461.3333
	2,4,6-Trichlorophenol	0	0	0	387	487.5	461.3333
	2,4-Dichlorophenol	0	0	0	387	487.5	461.3333
	2,4-Dimethylphenol	0	0	0	968	1219	1154.333
	2,4-Dinitrotoluene	0	0	0	57.85	24.36667	23.16667
	2,6-Dinitrotoluene	0	0	0	141.37	48.75	46.33333
	2-Chloronaphthalene	0	0	0	70.667	24.36667	23.16667
	2-Chlorophenol	0	0	0	387	487.5	461.3333
	3,4,5-Trichloroguaiacol	0	0	0	968	1219	1154.333
	3,4,6-Trichloroguaiacol	0	0	0	387	487.5	461.3333
	3,4-Dichloroguaiacol	0	0	0	968	1219	1154.333
	4,5,6-Trichloroguaiacol	0	0	0	968	1219	1154.333
	4,5-Dichloroguaiacol	0	0	0	968	1219	1154.333
	4,6-Dichloroguaiacol	0	0	0	968	1219	1154.333
	4-Bromophenyl-Phenylether	0	0	0	35.367	12.18333	11.56667
	4-Chloro-3-methylphenol	0	0	0	387	487.5	461.3333
	4-Chloroguaiacol	0	0	0	968	1219	1154.333

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
4-Chlorophenyl-Phenylether	0	0	0	35.367	12.18333	11.56667
9H-Fluorene	0	0	0	35.367	12.18333	11.56667
Acenaphthene	0	0	0	70.667	24.36667	23.16667
Acenaphthylene	0	0	0	35.367	12.18333	11.56667
Aldrin	0	0	0	1.9333	1.916667	1.966667
Alpha-BHC	0	0	0	1.9333	1.916667	1.966667
Alpha-Chlordene	0	0	0	1.9333	1.916667	1.966667
Aluminum	400	1166.667	0	2400	1333.333	1000
Anthracene	0	0	0	35.367	12.18333	11.56667
Antimony	0	0	0	116.67	50	50
Arsenic	316.667	830	852.6667	483.33	830	852.6667
Barium	0	0	0	466.67	200	200
Benzene, 1,2-dichloro-	0	0	0	35.367	12.18333	11.56667
Benzene, 1,3-dichloro-	0	0	0	35.367	12.18333	11.56667
Benzene, 1,4-dichloro-	0	0	0	35.367	12.18333	11.56667
Benzo(a)anthracene	0	0	0	35.367	21.53333	24.83333
Benzo(a)pyrene	0	0	0	35.367	21.53333	24.83333
Benzo(g,h,i)perylene	0	0	0	70.667	43.1	49.66667
Benzo[b]Fluoranthene	0	0	0	35.367	21.53333	24.83333
Benzo[k]fluoranthene	0	0	0	35.367	21.53333	24.83333
Beryllium	0	0	0	9.3333	4	4
Beta-BHC	0	0	0	1.9333	1.916667	1.966667
bis(2-Chloroisopropyl)ether	0	0	0	70.667	24.36667	23.16667
Cadmium	39	12.33333	142.3333	39	12.33333	142.3333
Chromium	0	0	113.3333	233.33	100	113.3333
Chrysene	0	0	0	35.367	21.53333	24.83333
cis-Chlordane (alpha-Chlordane)	0	0	0	1.9333	1.916667	1.966667
cis-Nonachlor	0	0	0	1.9333	1.916667	1.966667
Cobalt	27.6667	0	59.66667	27.667	1	59.66667
Copper	5806.67	738	1383.333	5806.7	738	1383.333
DDMU	0	0	0	1.9333	1.916667	1.966667
Delta-BHC	0	0	0	1.9333	1.916667	1.966667
Dibenz[a,h]anthracene	0	0	0	70.667	43.1	49.66667
Dibenzofuran	0	0	0	35.367	12.18333	11.56667
Endosulfan Sulfate	0	0	#DIV/0!	1.9333	1.9	#DIV/0!
Fluoranthene	0	0	0	70.667	24.36667	23.16667
Gamma-Chlordane	0	0	0	1.9333	1.916667	1.966667
gamma-Chlordene	0	0	0	1.9333	1.916667	1.966667
Heptachlor	0	0	0	1.9333	1.916667	1.966667
Heptachlor Epoxide	0	0	0	1.9333	1.916667	1.966667
Hexachlorobenzene	4.66667	3.083333	3.466667	4.6667	3.083333	3.466667
Hexachlorobutadiene	0	0	0	35.367	12.18333	11.56667
Hexachloroethane	0	0	0	35.367	12.18333	11.56667
Indeno(1,2,3-cd)pyrene	0	0	0	70.667	43.1	49.66667
Lead	7.33333	11	12.66667	27.333	16	16
Lindane	0	0	0	1.9333	1.916667	1.966667

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0	DL=0	DL=0	DL=DL	DL=DL	DL=DL
	Egg	Fillet+skin	WholeBody	Egg	Fillet+skin	WholeBody
Manganese	1423.33	87	419.6667	1423.3	87	419.6667
Mercury	0	40.66667	43.33333	105.67	120.6667	109.6667
Mirex	0	0	0	1.9333	1.916667	1.966667
Naphthalene	26.0333	0	0	75.433	52.6	39.83333
Naphthalene, 1-methyl-	0	0	0	35.367	12.18333	11.56667
Naphthalene, 2-methyl-	4.06667	1.683333	0	36.167	14.28333	11.56667
Nickel	40.3333	30.33333	0	90.333	35.33333	30
Nitrobenzene	0	0	0	35.367	12.18333	11.56667
n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
OCDD	0.00043	0.0002	9.67E-05	0.0004	0.000205	0.000103
OCDF	1.3E-05	0	0	8E-05	0.00002	0.00003
Oxychlorthane	0	0	0	1.9333	1.916667	1.966667
PCB 105	0.22	0.2195	0.247333	0.22	0.2195	0.247333
PCB 114	0.0194	0.019583	0.022	0.0194	0.019583	0.022
PCB 118	0.483	0.520667	0.567333	0.483	0.520667	0.567333
PCB 123	0.01076	0.0109	0.012467	0.0108	0.0109	0.012467
PCB 126	0.00252	0.002263	0.00137	0.0025	0.002555	0.00188
PCB 156	0.02983	0.0395	0.044333	0.0298	0.0395	0.044333
PCB 157	0.00856	0.0111	0.0114	0.0086	0.0111	0.0114
PCB 167	0.02037	0.0278	0.029667	0.0204	0.0278	0.029667
PCB 169	0	0	0	0.001	0.001	0.001027
PCB 170	0.045	0.06365	0.073067	0.045	0.06365	0.073067
PCB 180	0.14967	0.224333	0.250333	0.1497	0.224333	0.250333
PCB 189	0.00168	0.002652	0.00169	0.0017	0.002652	0.002023
Pentachloroanisol	1.30667	0	0.433333	1.3067	1.916667	1.766667
Pentachlorophenol	0	0	0	387	487.5	461.3333
Phenanthrene	0	0	0	35.367	12.18333	12.03333
Phenol	0	0	0	387	487.5	461.3333
Pyrene	0	0	4.266667	70.667	43.1	37.46667
Retene	0	0	0	70.667	43.1	49.66667
Selenium	4100	301.6667	445.6667	4100	301.6667	445.6667
Silver	0	0	0	233.33	100	100
Tetrachloroguaiacol	0	0	0	387	487.5	461.3333
Thallium	0	0	0	116.67	50	50
Toxaphene	0	0	0	57.667	57.66667	58.33333
trans-Nonachlor	2.9	3.516667	4.033333	2.9	3.516667	4.033333
Vanadium	11.6667	0	17	28.333	10	17
Zinc	46966.7	6571.667	21433.33	46967	6571.667	21433.33
Aroclor 1016	0	0	0	19.333	19.16667	19.66667
Aroclor 1221	0	0	0	19.333	19.16667	19.66667
Aroclor 1232	0	0	0	19.333	19.16667	19.66667
Aroclor 1242	0	0	0	19.333	19.16667	19.66667
Aroclor 1248	0	0	0	19.333	19.16667	19.66667
Aroclor 1254	16.3333	16.33333	17.66667	16.333	16.33333	17.66667
Aroclor 1260	0	0	0	19.333	19.16667	19.66667
PCB 077	0.0127	0.011717	0.013133	0.0127	0.011717	0.013133

Appendix E-11. Spring chinook station averages at full detection limits and at the detection limit set to zero.

Station	Detection Limits					
	DL=0 Egg	DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Egg	DL=DL Fillet+skin	DL=DL WholeBody
DDD-o,p'	0	0	0	1.9333	1.916667	1.966667
DDE-o,p'	0	0	0	1.9333	1.916667	1.966667
DDT-o,p'	0	0	0	1.9333	1.916667	1.966667
DDD-p,p'	3.33333	2.033333	2	3.3333	2.033333	2.666667
DDE-p,p'	13.3333	12.33333	13.66667	13.333	12.33333	13.66667
DDT-p,p'	6.26667	5.283333	6.366667	6.2667	5.283333	6.366667

Appendix E-12. Steelhead station averages at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=DL Egg	DL=0 Fillet+skin	DL=DL Fillet+skin	DL=0 WholeBody	DL=DL WholeBody
Sta. 8	1,2,3,4,6,7,8-HpCDD	0.00007	0.00007	0.000055	6.83E-05	4.67E-05	8.17E-05
	1,2,3,4,6,7,8-HpCDF	0	0.00002	8.33E-06	2.83E-05	0	4.17E-05
	1,2,3,4,7,8,9-HpCDF	0	0.00002	0	2.33E-05	0	4.17E-05
	1,2,3,4,7,8-HxCDD	0	0.00002	3.33E-06	0.00002	0.000005	1.67E-05
	1,2,3,4,7,8-HxCDF	0	0.00002	0.000005	2.17E-05	1.33E-05	0.00003
	1,2,3,6,7,8-HxCDD	0	0.00002	8.33E-06	0.000025	2.67E-05	0.000035
	1,2,3,6,7,8-HxCDF	0	0.00002	0.000005	2.17E-05	1.83E-05	3.67E-05
	1,2,3,7,8,9-HxCDD	0	0.00002	6.67E-06	2.17E-05	1.83E-05	2.67E-05
	1,2,3,7,8,9-HxCDF	0	0.00002	1.67E-06	1.83E-05	0	0.000025
	1,2,3,7,8-PeCDD	0	0.00003	6.33E-05	7.17E-05	0.00005	7.33E-05
	1,2,3,7,8-PeCDF	0	0.00002	1.67E-05	3.67E-05	6.67E-05	7.67E-05
	1,2,4-Trichlorobenzene	0	9.2	0	9.533333	0	9.5
	1,2-Diphenylhydrazine	0	9.2	0	9.533333	0	9.5
	2,3,4,6,7,8-HxCDF	0	0.00002	1.33E-05	2.67E-05	1.83E-05	3.67E-05
	2,3,4,6-Tetrachlorophenol	0	368	0	382	0	380.3333
	2,3,4,7,8-PeCDF	0	0.00002	0.000135	0.000147	0.000122	0.00013
	2,3,7,8-TCDD	0	0.00003	0	0.000025	1.33E-05	2.83E-05
	2,3,7,8-TCDF	0.00022	0.00022	0.000343	0.000343	0.000392	0.000392
	2,4,5-Trichlorophenol	0	368	0	382	0	380.3333
	2,4,6-Trichlorophenol	0	368	0	382	0	380.3333
	2,4-Dichlorophenol	0	368	0	382	0	380.3333
	2,4-Dimethylphenol	0	921	0	954.6667	0	951.1667
	2,4-Dinitrotoluene	0	18.4	0	19.06667	0	19
	2,6-Dinitrotoluene	0	36.8	0	38.15	0	38.01667
	2-Chloronaphthalene	0	18.4	0	19.06667	0	19
	2-Chlorophenol	0	368	0	382	0	380.3333
	3,4,5-Trichloroguaiacol	0	921	0	954.6667	0	951.1667
	3,4,6-Trichloroguaiacol	0	368	0	382	0	380.3333
	3,4-Dichloroguaiacol	0	921	0	954.6667	0	951.1667
	4,5,6-Trichloroguaiacol	0	921	0	954.6667	0	951.1667
	4,5-Dichloroguaiacol	0	921	0	954.6667	0	951.1667
	4,6-Dichloroguaiacol	0	921	0	954.6667	0	951.1667
	4-Bromophenyl-Phenylether	0	9.2	0	9.533333	0	9.5
	4-Chloro-3-methylphenol	0	368	0	382	0	380.3333
	4-Chloroguaiacol	0	921	0	954.6667	0	951.1667
	4-Chlorophenyl-Phenylether	0	9.2	0	9.533333	0	9.5
	9H-Fluorene	0	9.2	0	9.533333	0	9.5
	Acenaphthene	0	18.4	0	19.06667	0	19
	Acenaphthylene	0	9.2	0	9.533333	0	9.5
	Aldrin	0	2	0	1.983333	0	1.933333
	Alpha-BHC	0	2	0	1.983333	0	1.933333
	Alpha-Chlordene	0	2	0	1.983333	0	1.933333
	Aluminum	4500	4500	888.3333	1221.667	241.5	908.1667
	Anthracene	0	9.2	0	9.533333	0	9.5
	Antimony	0	50	0	50	0	50
	Arsenic	0	50	595.6667	595.6667	607.6667	607.6667

Appendix E-12. Steelhead station averages at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=DL Egg	DL=0 Fillet+skin	DL=DL Fillet+skin	DL=0 WholeBody	DL=DL WholeBody
	Barium	0	200	53.33333	220	0	200
	Benzene, 1,2-dichloro-	0	9.2	0	9.533333	0	9.5
	Benzene, 1,3-dichloro-	0	9.2	0	9.533333	0	9.5
	Benzene, 1,4-dichloro-	0	9.2	0	9.533333	0	9.5
	Benzo(a)anthracene	0	9.2	0	9.533333	0	9.5
	Benzo(a)pyrene	0	9.2	0	9.533333	0	9.5
	Benzo(g,h,i)perylene	0	18.4	0	19.06667	0	19
	Benzo[b]Fluoranthene	0	9.2	0	9.533333	0	9.5
	Benzo[k]fluoranthene	0	9.2	0	9.533333	0	9.5
	Beryllium	0	4	0	4	0	4
	Beta-BHC	0	2	0	1.983333	0	1.933333
	bis(2-Chloroisopropyl)ether	0	18.4	0	19.06667	0	19
	Cadmium	34	34	6.716667	6.716667	49.83333	49.83333
	Chromium	220	220	33.33333	116.6667	56.66667	106.6667
	Chrysene	0	9.2	0	9.533333	0	9.5
	cis-Chlordane (alpha-Chlordane)	1.3	1.3	0.5	1.833333	0.35	1.966667
	cis-Nonachlor	0	2	0	1.983333	0	1.933333
	Cobalt	170	170	55.7	55.7	112.8333	112.8333
	Copper	18100	18100	658.1667	658.1667	2685	2685
	DDMU	0	2	0	1.983333	0	1.933333
	Delta-BHC	0	2	0	1.983333	0	1.933333
	Dibenz[a,h]anthracene	0	18.4	0	19.06667	0	19
	Dibenzofuran	0	9.2	0	9.533333	0	9.5
	Endosulfan Sulfate	0	2	0	1.983333	0	1.933333
	Fluoranthene	0	18.4	0	19.06667	0	19
	Gamma-Chlordane	0	2	0	1.983333	0	1.933333
	gamma-Chlordene	0	2	0	1.983333	0	1.933333
	Heptachlor	0	2	0	1.983333	0	1.933333
	Heptachlor Epoxide	0	2	0	1.983333	0	1.933333
	Hexachlorobenzene	1.9	1.9	1.033333	1.7	1.933333	1.933333
	Hexachlorobutadiene	0	9.2	0	9.533333	0	9.5
	Hexachloroethane	0	9.2	0	9.533333	0	9.5
	Indeno(1,2,3-cd)pyrene	0	18.4	0	19.06667	0	19
	Lead	41	41	8.833333	13.83333	10.5	15.5
	Lindane	0	2	0	1.983333	0	1.933333
	Manganese	2200	2200	140.3333	140.3333	364.1667	364.1667
	Mercury	0	43	106	106	79	87.33333
	Mirex	0	2	0	1.983333	0	1.933333
	Naphthalene	0	21.7	0	14.8	0	13.81667
	Naphthalene, 1-methyl-	0	9.2	0	9.533333	0	9.5
	Naphthalene, 2-methyl-	0	9.2	0	9.533333	0	9.5
	Nickel	515	515	41	46	83.16667	88.16667
	Nitrobenzene	0	9.2	0	9.533333	0	9.5
	n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	0.00038	0.00038	0.000285	0.000288	0.000718	0.000738
	OCDF	0	0.00003	0.00001	5.17E-05	7.17E-05	0.000167

Appendix E-12. Steelhead station averages at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=DL Egg	DL=0 Fillet+skin	DL=DL Fillet+skin	DL=0 WholeBody	DL=DL WholeBody
	Oxychlorthane	0	2	0	1.983333	0	1.933333
	PCB 105	0.153	0.153	0.206333	0.206333	0.251167	0.251167
	PCB 114	0.0146	0.0146	0.020783	0.020783	0.025533	0.025533
	PCB 118	0.351	0.351	0.506333	0.506333	0.610667	0.610667
	PCB 123	0.00575	0.00575	0.00887	0.00887	0.01166	0.01166
	PCB 126	0.00212	0.00212	0.003242	0.003408	0.005258	0.005258
	PCB 156	0.028	0.028	0.046417	0.046417	0.0554	0.0554
	PCB 157	0.00766	0.00766	0.013033	0.013033	0.015917	0.015917
	PCB 167	0.0181	0.0181	0.0306	0.0306	0.0361	0.0361
	PCB 169	0	0.001	0	0.001	0	0.001135
	PCB 170	0.0545	0.0545	0.090933	0.090933	0.109167	0.109167
	PCB 180	0.16	0.16	0.284167	0.284167	0.326167	0.326167
	PCB 189	0	0.001	0.004113	0.004113	0.004737	0.004737
	Pentachloroanisole	0	2	0	1.983333	0	1.933333
	Pentachlorophenol	0	368	0	382	0	380.3333
	Phenanthrene	0	9.2	0	9.533333	0	9.5
	Phenol	0	368	0	382	0	380.3333
	Pyrene	0	18.4	0	19.06667	0	19
	Retene	0	18.4	0	19.06667	0	19
	Selenium	4490	4490	296.6667	380	678.8333	678.8333
	Silver	0	100	0	100	0	100
	Tetrachloroguaiacol	0	368	0	382	0	380.3333
	Thallium	0	50	0	50	0	50
	Toxaphene	0	60	0	59	0	57.83333
	trans-Nonachlor	1	1	0.6	1.916667	1.716667	2.033333
	Vanadium	112	112	11	17.66667	70.66667	70.66667
	Zinc	76300	76300	8108.333	8108.333	20183.33	20183.33
	Aroclor 1016	0	20	0	19.83333	0	19.33333
	Aroclor 1221	0	20	0	19.83333	0	19.33333
	Aroclor 1232	0	20	0	19.83333	0	19.33333
	Aroclor 1242	0	20	0	19.83333	0	19.33333
	Aroclor 1248	0	20	0	19.83333	0	19.33333
	Aroclor 1254	15	15	15.33333	15.33333	17.5	17.5
	Aroclor 1260	0	20	0	19.83333	0	19.33333
	PCB 077	0.00798	0.00798	0.012267	0.012267	0.014625	0.014625
	DDD-o,p'	0	2	0	1.983333	0	1.933333
	DDE-o,p'	0	2	0.493333	1.476667	0.416667	1.716667
	DDT-o,p'	0	2	0	1.983333	0	1.933333
	DDD-p,p'	3.3	3.3	4.35	4.35	5.55	5.55
	DDE-p,p'	6.5	6.5	6.783333	6.783333	7.966667	7.966667
	DDT-p,p'	0	2	1.283333	1.95	0.716667	2
Sta. 25	1,2,3,4,6,7,8-HpCDD			0.00002	0.00004	0.00005	5.67E-05
	1,2,3,4,6,7,8-HpCDF			1.33E-05	0.00003	0	0.00003
	1,2,3,4,7,8,9-HpCDF			0	0.00003	0	0.00003
	1,2,3,4,7,8-HxCDD			6.67E-06	2.67E-05	0	2.67E-05
	1,2,3,4,7,8-HxCDF			0.00002	2.33E-05	0	1.67E-05

Appendix E-12. Steelhead station averages at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=DL Egg	DL=0 Fillet+skin	DL=DL Fillet+skin	DL=0 WholeBody	DL=DL WholeBody
	1,2,3,6,7,8-HxCDD			1.33E-05	3.33E-05	0	2.67E-05
	1,2,3,6,7,8-HxCDF			0	1.33E-05	1.67E-05	2.67E-05
	1,2,3,7,8,9-HxCDD			0	2.67E-05	0	2.67E-05
	1,2,3,7,8,9-HxCDF			0	1.33E-05	0	1.67E-05
	1,2,3,7,8-PeCDD			0.00008	0.00008	0	2.33E-05
	1,2,3,7,8-PeCDF			0.00007	0.00007	0	2.33E-05
	1,2,4-Trichlorobenzene			0	9.733333	0	8.866667
	1,2-Diphenylhydrazine			0	41.13333	0	8.866667
	2,3,4,6,7,8-HxCDF			0	1.33E-05	2.33E-05	3.33E-05
	2,3,4,6-Tetrachlorophenol			0	388.3333	0	354.6667
	2,3,4,7,8-PeCDF			0.00013	0.000137	0.00023	0.00023
	2,3,7,8-TCDD			1.33E-05	2.67E-05	1.33E-05	2.67E-05
	2,3,7,8-TCDF			0.0003	0.0003	0.000347	0.000347
	2,4,5-Trichlorophenol			0	388.3333	0	354.6667
	2,4,6-Trichlorophenol			0	388.3333	0	354.6667
	2,4-Dichlorophenol			0	388.3333	0	354.6667
	2,4-Dimethylphenol			0	971	0	886.3333
	2,4-Dinitrotoluene			0	19.35	0	17.73333
	2,6-Dinitrotoluene			0	38.83333	0	35.46667
	2-Chloronaphthalene			0	19.43333	0	17.73333
	2-Chlorophenol			0	388.3333	0	354.6667
	3,4,5-Trichloroguaiacol			0	971	0	886.3333
	3,4,6-Trichloroguaiacol			0	388.3333	0	354.6667
	3,4-Dichloroguaiacol			0	971	0	886.3333
	4,5,6-Trichloroguaiacol			0	971	0	886.3333
	4,5-Dichloroguaiacol			0	971	0	886.3333
	4,6-Dichloroguaiacol			0	971	0	886.3333
	4-Bromophenyl-Phenylether			0	9.733333	0	8.866667
	4-Chloro-3-methylphenol			0	388.3333	0	354.6667
	4-Chloroguaiacol			0	971	0	886.3333
	4-Chlorophenyl-Phenylether			0	9.733333	0	8.866667
	9H-Fluorene			0	9.733333	0	8.866667
	Acenaphthene			0	19.43333	0	17.73333
	Acenaphthylene			0	9.733333	0	8.866667
	Aldrin			0	1.766667	0	1.8
	Alpha-BHC			0	1.766667	0	1.8
	Alpha-Chlordene			0	1.766667	0	1.8
	Aluminum			0	1000	0	1000
	Anthracene			0	9.733333	0	8.866667
	Antimony			0	50	0	50
	Arsenic			930	930	893.3333	893.3333
	Barium			0	200	73.33333	206.6667
	Benzene, 1,2-dichloro-			0	9.733333	0	8.866667
	Benzene, 1,3-dichloro-			0	9.733333	0	8.866667
	Benzene, 1,4-dichloro-			0	9.733333	0	8.866667
	Benzo(a)anthracene			0	9.733333	0	8.866667

Appendix E-12. Steelhead station averages at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=DL Egg	DL=0 Fillet+skin	DL=DL Fillet+skin	DL=0 WholeBody	DL=DL WholeBody
	Benzo(a)pyrene			0	9.733333	0	8.866667
	Benzo(g,h,i)perylene			0	19.43333	0	17.73333
	Benzo[b]Fluoranthene			0	9.733333	0	8.866667
	Benzo[k]fluoranthene			0	9.733333	0	8.866667
	Beryllium			0	4	0	4
	Beta-BHC			0	1.766667	0	1.8
	bis(2-Chloroisopropyl)ether			0	19.43333	0	17.73333
	Cadmium			5.366667	5.366667	64.33333	64.33333
	Chromium			173.3333	173.3333	116.6667	150
	Chrysene			0	9.733333	0	8.866667
	cis-Chlordane (alpha-Chlordane)			0	1.766667	0	1.8
	cis-Nonachlor			1.066667	1.7	1.133333	1.733333
	Cobalt			156.6667	156.6667	180.6667	180.6667
	Copper			748.6667	748.6667	3223.333	3223.333
	DDMU			1.066667	1.7	1.1	1.7
	Delta-BHC			0	1.766667	0	1.8
	Dibenz[a,h]anthracene			0	19.43333	0	17.73333
	Dibenzofuran			0	9.733333	0	8.866667
	Endosulfan Sulfate			0	1.766667	0	1.8
	Fluoranthene			0	19.43333	0	17.73333
	Gamma-Chlordane			0	1.766667	0	1.8
	gamma-Chlordene			0	1.766667	0	1.8
	Heptachlor			0	1.766667	0	1.8
	Heptachlor Epoxide			0	1.766667	0	1.8
	Hexachlorobenzene			1.233333	1.233333	1.666667	1.666667
	Hexachlorobutadiene			0	9.733333	0	8.866667
	Hexachloroethane			0	9.733333	0	8.866667
	Indeno(1,2,3-cd)pyrene			0	19.43333	0	17.73333
	Lead			0	10	0	10
	Lindane			0	1.766667	0	1.8
	Manganese			130	130	476.3333	476.3333
	Mercury			137.3333	137.3333	71.33333	104.6667
	Mirex			0	1.766667	0	1.8
	Naphthalene			0	9.733333	0	8.866667
	Naphthalene, 1-methyl-			0	9.733333	0	8.866667
	Naphthalene, 2-methyl-			0	9.733333	0	8.866667
	Nickel			55	55	64.66667	64.66667
	Nitrobenzene			0	9.733333	0	8.866667
	n-Nitrosodiphenylamine			#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD			8.33E-05	0.000103	4.33E-05	6.33E-05
	OCDF			0	4.33E-05	0	3.67E-05
	Oxychlordane			0	1.766667	0	1.8
	PCB 105			0.215667	0.215667	0.249667	0.249667
	PCB 114			0.0221	0.0221	0.025133	0.025133
	PCB 118			0.520667	0.520667	0.607667	0.607667
	PCB 123			0.008193	0.008193	0.011867	0.011867

Appendix E-12. Steelhead station averages at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=DL Egg	DL=0 Fillet+skin	DL=DL Fillet+skin	DL=0 WholeBody	DL=DL WholeBody
	PCB 126			0.003637	0.003637	0.001903	0.002443
	PCB 156			0.052667	0.052667	0.0586	0.0586
	PCB 157			0.015	0.015	0.017067	0.017067
	PCB 167			0.031867	0.031867	0.036067	0.036067
	PCB 169			0	0.002997	0	0.002843
	PCB 170			0.089533	0.089533	0.101033	0.101033
	PCB 180			0.274	0.274	0.312333	0.312333
	PCB 189			0.003783	0.003783	0.003717	0.003717
	Pentachloroanisol			0	1.766667	0.303333	1.503333
	Pentachlorophenol			0	388.3333	0	354.6667
	Phenanthrene			0	9.733333	0	8.866667
	Phenol			0	388.3333	0	354.6667
	Pyrene			0	19.43333	0	17.73333
	Retene			0	19.43333	0	17.73333
	Selenium			370	370	858	858
	Silver			0	100	0	100
	Tetrachloroguaiacol			0	388.3333	0	354.6667
	Thallium			0	50	0	50
	Toxaphene			0	53	0	53.66667
	trans-Nonachlor			1.333333	1.966667	1.333333	1.933333
	Vanadium			0	10	69.66667	69.66667
	Zinc			6440	6440	23666.67	23666.67
	Aroclor 1016			0	17.66667	0	18
	Aroclor 1221			0	17.66667	0	18
	Aroclor 1232			0	17.66667	0	18
	Aroclor 1242			0	17.66667	0	18
	Aroclor 1248			0	17.66667	0	18
	Aroclor 1254			10.46667	10.46667	10.63333	10.63333
	Aroclor 1260			6.733333	6.733333	8.133333	8.133333
	PCB 077			0.01265	0.01265	0.015167	0.015167
	DDD-o,p'			0	1.766667	0	1.8
	DDE-o,p'			0	1.766667	0.5	1.7
	DDT-o,p'			0	1.766667	0	1.8
	DDD-p,p'			3.166667	3.166667	3.9	3.9
	DDE-p,p'			9.433333	9.433333	10.76667	10.76667
	DDT-p,p'			3.033333	3.033333	2.633333	2.633333
Sta. 48	1,2,3,4,6,7,8-HpCDD			0.00008	8.33E-05	0.00012	0.00012
	1,2,3,4,6,7,8-HpCDF			0	1.33E-05	0	1.67E-05
	1,2,3,4,7,8,9-HpCDF			0.00001	1.67E-05	0	1.67E-05
	1,2,3,4,7,8-HxCDD			1.33E-05	1.67E-05	0.00001	0.00002
	1,2,3,4,7,8-HxCDF			0.00001	1.67E-05	6.67E-06	1.33E-05
	1,2,3,6,7,8-HxCDD			1.67E-05	2.67E-05	0.00005	5.33E-05
	1,2,3,6,7,8-HxCDF			3.33E-06	0.00001	0	1.33E-05
	1,2,3,7,8,9-HxCDD			2.33E-05	2.67E-05	2.67E-05	3.33E-05
	1,2,3,7,8,9-HxCDF			0	0.00001	0	1.33E-05
	1,2,3,7,8-PeCDD			6.67E-05	6.67E-05	4.67E-05	5.33E-05

Appendix E-12. Steelhead station averages at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=DL Egg	DL=0 Fillet+skin	DL=DL Fillet+skin	DL=0 WholeBody	DL=DL WholeBody
	1,2,3,7,8-PeCDF			0.00003	4.33E-05	0.00008	8.67E-05
	1,2,4-Trichlorobenzene			0	8.666667	0	9.533333
	1,2-Diphenylhydrazine			0	8.666667	0	9.533333
	2,3,4,6,7,8-HxCDF			0.00002	2.33E-05	0.00001	0.00002
	2,3,4,6-Tetrachlorophenol			0	347.3333	0	382.3333
	2,3,4,7,8-PeCDF			9.67E-05	0.0001	0.000163	0.00017
	2,3,7,8-TCDD			1.33E-05	0.00003	0.00002	0.00003
	2,3,7,8-TCDF			0.000423	0.000423	0.000453	0.000453
	2,4,5-Trichlorophenol			0	347.3333	0	382.3333
	2,4,6-Trichlorophenol			0	347.3333	0	382.3333
	2,4-Dichlorophenol			0	347.3333	0	382.3333
	2,4-Dimethylphenol			0	868.6667	0	955
	2,4-Dinitrotoluene			0	17.36667	0	19.1
	2,6-Dinitrotoluene			0	34.73333	0	38.23333
	2-Chloronaphthalene			0	17.36667	0	19.1
	2-Chlorophenol			0	347.3333	0	382.3333
	3,4,5-Trichloroguaiacol			0	868.6667	0	955
	3,4,6-Trichloroguaiacol			0	347.3333	0	382.3333
	3,4-Dichloroguaiacol			0	868.6667	0	955
	4,5,6-Trichloroguaiacol			0	868.6667	0	955
	4,5-Dichloroguaiacol			0	868.6667	0	955
	4,6-Dichloroguaiacol			0	868.6667	0	955
	4-Bromophenyl-Phenylether			0	8.666667	0	9.533333
	4-Chloro-3-methylphenol			0	347.3333	0	382.3333
	4-Chloroguaiacol			0	868.6667	0	955
	4-Chlorophenyl-Phenylether			0	8.666667	0	9.533333
	9H-Fluorene			0	8.666667	0	9.533333
	Acenaphthene			0	17.36667	0	19.1
	Acenaphthylene			0	8.666667	0	9.533333
	Aldrin			0	1.9	0	1.966667
	Alpha-BHC			0	1.9	0	1.966667
	Alpha-Chlordene			0	1.9	0	1.966667
	Aluminum			279.6667	946.3333	168	834.6667
	Anthracene			0	8.666667	0	9.533333
	Antimony			0	50	0	50
	Arsenic			356.6667	356.6667	330	330
	Barium			70	203.3333	163.3333	230
	Benzene, 1,2-dichloro-			0	8.666667	0	9.533333
	Benzene, 1,3-dichloro-			0	8.666667	0	9.533333
	Benzene, 1,4-dichloro-			0	8.666667	0	9.533333
	Benzo(a)anthracene			0	8.666667	0	9.533333
	Benzo(a)pyrene			0	8.666667	0	9.533333
	Benzo(g,h,i)perylene			0	17.36667	0	19.1
	Benzo[b]Fluoranthene			0	8.666667	0	9.533333
	Benzo[k]fluoranthene			0	8.666667	0	9.533333
	Beryllium			0	4	0	4

Appendix E-12. Steelhead station averages at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=DL Egg	DL=0 Fillet+skin	DL=DL Fillet+skin	DL=0 WholeBody	DL=DL WholeBody
	Beta-BHC			0	1.9	0	1.966667
	bis(2-Chloroisopropyl)ether			0	17.36667	0	19.1
	Cadmium			6.9	6.9	73	73
	Chromium			80	113.3333	126.6667	160
	Chrysene			0	8.666667	0	9.533333
	cis-Chlordane (alpha-Chlordane)			0	1.9	0	1.966667
	cis-Nonachlor			0	1.9	0	1.966667
	Cobalt			112.3333	112.3333	158.3333	158.3333
	Copper			790.6667	790.6667	2416.667	2416.667
	DDMU			0	1.9	0	1.966667
	Delta-BHC			0	1.9	0	1.966667
	Dibenz[a,h]anthracene			0	17.36667	0	19.1
	Dibenzofuran			0	8.666667	0	9.533333
	Endosulfan Sulfate			0	1.9	0	1.966667
	Fluoranthene			0	17.36667	0	19.1
	Gamma-Chlordane			0	1.9	0	1.966667
	gamma-Chlordene			0	1.9	0	1.966667
	Heptachlor			0	1.9	0	1.966667
	Heptachlor Epoxide			0	1.9	0	1.966667
	Hexachlorobenzene			1.1	1.766667	1.566667	1.566667
	Hexachlorobutadiene			0	8.666667	0	9.533333
	Hexachloroethane			0	8.666667	0	9.533333
	Indeno(1,2,3-cd)pyrene			0	17.36667	0	19.1
	Lead			0	10	0	10
	Lindane			0	1.9	0	1.966667
	Manganese			165.6667	165.6667	563.3333	563.3333
	Mercury			122.3333	122.3333	70	103.3333
	Mirex			0	1.9	0	1.966667
	Naphthalene			0	9.133333	0	9.533333
	Naphthalene, 1-methyl-			0	8.666667	0	9.533333
	Naphthalene, 2-methyl-			0	8.666667	0	9.533333
	Nickel			49.66667	49.66667	70.33333	70.33333
	Nitrobenzene			0	8.666667	0	9.533333
	n-Nitrosodiphenylamine			#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD			0.000137	0.00014	0.00024	0.00024
	OCDF			0	0.00001	0.00002	2.67E-05
	Oxychlordane			0	1.9	0	1.966667
	PCB 105			0.215	0.215	0.241333	0.241333
	PCB 114			0.0222	0.0222	0.024667	0.024667
	PCB 118			0.514	0.514	0.582	0.582
	PCB 123			0.00983	0.00983	0.016967	0.016967
	PCB 126			0.00249	0.002737	0.00238	0.00274
	PCB 156			0.050667	0.050667	0.0601	0.0601
	PCB 157			0.0135	0.0135	0.0145	0.0145
	PCB 167			0.0303	0.0303	0.0362	0.0362
	PCB 169			0	0.001107	0	0.001993

Appendix E-12. Steelhead station averages at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=DL Egg	DL=0 Fillet+skin	DL=DL Fillet+skin	DL=0 WholeBody	DL=DL WholeBody
	PCB 170			0.102833	0.102833	0.126567	0.126567
	PCB 180			0.338333	0.338333	0.410667	0.410667
	PCB 189			0.003497	0.003497	0.00431	0.00431
	Pentachloroanisol			0	1.9	0	1.966667
	Pentachlorophenol			0	347.3333	0	382.3333
	Phenanthrene			0	8.666667	0	9.533333
	Phenol			0	347.3333	0	382.3333
	Pyrene			0	17.36667	0	19.1
	Retene			0	17.36667	0	19.1
	Selenium			303.3333	303.3333	476.6667	476.6667
	Silver			0	100	0	100
	Tetrachloroguaiacol			0	347.3333	0	382.3333
	Thallium			0	50	0	50
	Toxaphene			0	57	0	59.66667
	trans-Nonachlor			1.1	1.766667	1.766667	1.766667
	Vanadium			0	20	25.66667	32.33333
	Zinc			9176.667	9176.667	19366.67	19366.67
	Aroclor 1016			0	19	0	19.66667
	Aroclor 1221			0	19	0	19.66667
	Aroclor 1232			0	19	0	19.66667
	Aroclor 1242			0	19	0	19.66667
	Aroclor 1248			0	19	0	19.66667
	Aroclor 1254			14.66667	14.66667	19	19
	Aroclor 1260			4.633333	11.3	5.333333	12
	PCB 077			0.01499	0.01499	0.016433	0.016433
	DDD-o,p'			0	1.9	0	1.966667
	DDE-o,p'			0	1.9	1.066667	1.733333
	DDT-o,p'			0	1.9	0	1.966667
	DDD-p,p'			7.433333	7.433333	6.4	6.4
	DDE-p,p'			19.66667	19.66667	25.66667	25.66667
	DDT-p,p'			0	1.9	0	1.966667
Sta. 56	1,2,3,4,6,7,8-HpCDD			0.00002	3.67E-05	3.67E-05	0.00007
	1,2,3,4,6,7,8-HpCDF			0	3.33E-05	0	2.33E-05
	1,2,3,4,7,8,9-HpCDF			0	3.33E-05	0	2.33E-05
	1,2,3,4,7,8-HxCDD			0	2.33E-05	0	0.00002
	1,2,3,4,7,8-HxCDF			0	3.33E-05	0	0.00002
	1,2,3,6,7,8-HxCDD			0	2.33E-05	0.00002	3.67E-05
	1,2,3,6,7,8-HxCDF			0	0.00003	0	0.00002
	1,2,3,7,8,9-HxCDD			6.67E-06	2.33E-05	0	0.00002
	1,2,3,7,8,9-HxCDF			0	3.33E-05	0	0.00002
	1,2,3,7,8-PeCDD			2.67E-05	0.00005	0.00003	4.67E-05
	1,2,3,7,8-PeCDF			0	0.00003	3.33E-05	0.00006
	1,2,4-Trichlorobenzene			0	9.266667	0	9.666667
	1,2-Diphenylhydrazine			0	9.7	0	9.95
	2,3,4,6,7,8-HxCDF			0	3.33E-05	0	0.00002
	2,3,4,6-Tetrachlorophenol			0	370.6667	0	387.3333

Appendix E-12. Steelhead station averages at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=DL Egg	DL=0 Fillet+skin	DL=DL Fillet+skin	DL=0 WholeBody	DL=DL WholeBody
	2,3,4,7,8-PeCDF			0.000247	0.000247	0.00017	0.000187
	2,3,7,8-TCDD			0	2.67E-05	0	2.33E-05
	2,3,7,8-TCDF			0.00038	0.00038	0.000413	0.000413
	2,4,5-Trichlorophenol			0	370.6667	0	387.3333
	2,4,6-Trichlorophenol			0	370.6667	0	387.3333
	2,4-Dichlorophenol			0	370.6667	0	387.3333
	2,4-Dimethylphenol			0	927.3333	0	968
	2,4-Dinitrotoluene			0	19.4	0	19.9
	2,6-Dinitrotoluene			0	37.06667	0	38.73333
	2-Chloronaphthalene			0	18.53333	0	19.36667
	2-Chlorophenol			0	370.6667	0	387.3333
	3,4,5-Trichloroguaiacol			0	927.3333	0	968
	3,4,6-Trichloroguaiacol			0	370.6667	0	387.3333
	3,4-Dichloroguaiacol			0	927.3333	0	968
	4,5,6-Trichloroguaiacol			0	927.3333	0	968
	4,5-Dichloroguaiacol			0	927.3333	0	968
	4,6-Dichloroguaiacol			0	927.3333	0	968
	4-Bromophenyl-Phenylether			0	9.266667	0	9.666667
	4-Chloro-3-methylphenol			0	370.6667	0	387.3333
	4-Chloroguaiacol			0	927.3333	0	968
	4-Chlorophenyl-Phenylether			0	9.266667	0	9.666667
	9H-Fluorene			0	9.266667	0	9.666667
	Acenaphthene			0	18.53333	0	19.36667
	Acenaphthylene			0	9.266667	0	9.666667
	Aldrin			0	1.966667	0	1.966667
	Alpha-BHC			0	1.966667	0	1.966667
	Alpha-Chlordene			0	1.966667	0	1.966667
	Aluminum			0	1000	0	1000
	Anthracene			0	9.266667	0	9.666667
	Antimony			0	50	0	50
	Arsenic			661.3333	661.3333	667.3333	667.3333
	Barium			0	200	0	200
	Benzene, 1,2-dichloro-			0	9.266667	0	9.666667
	Benzene, 1,3-dichloro-			0	9.266667	0	9.666667
	Benzene, 1,4-dichloro-			0	9.266667	0	9.666667
	Benzo(a)anthracene			0	9.266667	0	9.666667
	Benzo(a)pyrene			0	9.7	0	9.666667
	Benzo(g,h,i)perylene			0	18.53333	0	19.36667
	Benzo[b]Fluoranthene			0	9.266667	0	9.666667
	Benzo[k]fluoranthene			0	9.266667	0	9.666667
	Beryllium			0	4	0	4
	Beta-BHC			0	1.966667	0	1.966667
	bis(2-Chloroisopropyl)ether			0	18.53333	0	19.36667
	Cadmium			3.433333	4.766667	46	46
	Chromium			0	100	180	180
	Chrysene			0	9.266667	0	9.666667

Appendix E-12. Steelhead station averages at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=DL Egg	DL=0 Fillet+skin	DL=DL Fillet+skin	DL=0 WholeBody	DL=DL WholeBody
	cis-Chlordane (alpha-Chlordane)			1.233333	1.233333	1.3	1.966667
	cis-Nonachlor			0	1.966667	1.166667	1.833333
	Cobalt			7	7	106.6667	106.6667
	Copper			559.3333	559.3333	5393.333	5393.333
	DDMU			0	1.966667	1	1.666667
	Delta-BHC			0	1.966667	0	1.966667
	Dibenz[a,h]anthracene			0	18.53333	0	19.36667
	Dibenzofuran			0	9.266667	0	9.666667
	Endosulfan Sulfate			0	1.966667	#DIV/0!	#DIV/0!
	Fluoranthene			0	18.53333	0	19.36667
	Gamma-Chlordane			0	1.966667	0	1.966667
	gamma-Chlordene			0	1.966667	0	1.966667
	Heptachlor			0	1.966667	0	1.966667
	Heptachlor Epoxide			0	1.966667	#DIV/0!	#DIV/0!
	Hexachlorobenzene			1.433333	1.433333	2.333333	2.333333
	Hexachlorobutadiene			0	9.266667	0	9.666667
	Hexachloroethane			0	9.266667	0	9.666667
	Indeno(1,2,3-cd)pyrene			0	18.53333	0	19.36667
	Lead			0	10	169.3333	169.3333
	Lindane			0	1.966667	0	1.966667
	Manganese			137	137	452.6667	452.6667
	Mercury			115.6667	115.6667	82.33333	82.33333
	Mirex			0	1.966667	0	1.966667
	Naphthalene			0	21.2	0	46.7
	Naphthalene, 1-methyl-			0	9.266667	0	9.666667
	Naphthalene, 2-methyl-			0	10.06667	0	10.1
	Nickel			11.66667	31.66667	5865.667	5865.667
	Nitrobenzene			0	9.266667	0	9.666667
	n-Nitrosodiphenylamine			#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD			7.67E-05	0.000113	0.000853	0.00087
	OCDF			0	5.33E-05	0	0.000107
	Oxychlordane			0	1.966667	0	1.966667
	PCB 105			0.213	0.213	0.255667	0.255667
	PCB 114			0.0214	0.0214	0.025833	0.025833
	PCB 118			0.509667	0.509667	0.626	0.626
	PCB 123			0.0082	0.0082	0.010227	0.010227
	PCB 126			0.004373	0.004373	0.00346	0.003737
	PCB 156			0.046167	0.046167	0.058467	0.058467
	PCB 157			0.012733	0.012733	0.017	0.017
	PCB 167			0.0296	0.0296	0.035467	0.035467
	PCB 169			0	0.001	0	0.001
	PCB 170			0.088433	0.088433	0.1088	0.1088
	PCB 180			0.276333	0.276333	0.329	0.329
	PCB 189			0.003697	0.003697	0.00141	0.002077
	Pentachloroanisol			0	1.966667	0.566667	1.9
	Pentachlorophenol			0	370.6667	0	387.3333

Appendix E-12. Steelhead station averages at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=DL Egg	DL=0 Fillet+skin	DL=DL Fillet+skin	DL=0 WholeBody	DL=DL WholeBody
	Phenanthrene			0	9.266667	0	9.666667
	Phenol			0	370.6667	0	387.3333
	Pyrene			0	18.53333	0	19.36667
	Retene			0	18.53333	0	19.36667
	Selenium			336.6667	336.6667	723.6667	723.6667
	Silver			0	100	0	100
	Tetrachloroguaiacol			0	370.6667	0	387.3333
	Thallium			0	50	0	50
	Toxaphene			0	59	0	59
	trans-Nonachlor			1.2	1.2	1.433333	2.1
	Vanadium			14	17.33333	40.66667	40.66667
	Zinc			7133.333	7133.333	21866.67	21866.67
	Aroclor 1016			0	19.66667	0	19.66667
	Aroclor 1221			0	19.66667	0	19.66667
	Aroclor 1232			0	19.66667	0	19.66667
	Aroclor 1242			0	19.66667	0	19.66667
	Aroclor 1248			0	19.66667	0	19.66667
	Aroclor 1254			15	15	19.33333	19.33333
	Aroclor 1260			0	19.66667	0	19.66667
	PCB 077			0.013533	0.013533	0.0155	0.0155
	DDD-o,p'			0	1.966667	0	1.966667
	DDE-o,p'			0	1.966667	0	1.966667
	DDT-o,p'			0	1.966667	0	1.966667
	DDD-p,p'			2.3	2.3	2.8	2.8
	DDE-p,p'			5.466667	5.466667	8.066667	8.066667
	DDT-p,p'			1.333333	2	4.4	4.4
Sta. 93	1,2,3,4,6,7,8-HpCDD			0.000197	0.000197	0.000183	0.000183
	1,2,3,4,6,7,8-HpCDF			5.67E-05	0.00006	0.00005	5.67E-05
	1,2,3,4,7,8,9-HpCDF			0	0.00001	0	1.33E-05
	1,2,3,4,7,8-HxCDD			0.0001	0.0001	3.33E-05	4.33E-05
	1,2,3,4,7,8-HxCDF			0	1.67E-05	0.00001	0.00002
	1,2,3,6,7,8-HxCDD			2.67E-05	3.67E-05	0.00006	6.33E-05
	1,2,3,6,7,8-HxCDF			2.67E-05	3.33E-05	1.33E-05	0.00002
	1,2,3,7,8,9-HxCDD			0.00001	0.00002	0	1.33E-05
	1,2,3,7,8,9-HxCDF			0.00002	0.00003	2.33E-05	3.33E-05
	1,2,3,7,8-PeCDD			5.33E-05	6.33E-05	0.00005	5.67E-05
	1,2,3,7,8-PeCDF			0.00006	6.33E-05	0.00011	0.00011
	1,2,4-Trichlorobenzene			0	4.633333	0	11.8
	1,2-Diphenylhydrazine			0	4.633333	0	11.8
	2,3,4,6,7,8-HxCDF			0.000157	0.000157	0.000157	0.000157
	2,3,4,6-Tetrachlorophenol			0	186.3333	0	259
	2,3,4,7,8-PeCDF			0.00018	0.00018	0.000233	0.000233
	2,3,7,8-TCDD			1.67E-05	2.33E-05	0	2.67E-05
	2,3,7,8-TCDF			0.0004	0.0004	0.000543	0.000543
	2,4,5-Trichlorophenol			0	186.3333	0	259
	2,4,6-Trichlorophenol			0	186.3333	0	259

Appendix E-12. Steelhead station averages at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=DL Egg	DL=0 Fillet+skin	DL=DL Fillet+skin	DL=0 WholeBody	DL=DL WholeBody
	2,4-Dichlorophenol			0	186.3333	0	259
	2,4-Dimethylphenol			0	466	0	647.5
	2,4-Dinitrotoluene			0	9.3	0	23.66667
	2,6-Dinitrotoluene			0	18.63333	0	47.43333
	2-Chloronaphthalene			0	9.3	0	23.66667
	2-Chlorophenol			0	186.3333	0	259
	3,4,5-Trichloroguaiacol			0	466	0	647.5
	3,4,6-Trichloroguaiacol			0	186.3333	0	259
	3,4-Dichloroguaiacol			0	466	0	647.5
	4,5,6-Trichloroguaiacol			0	466	0	647.5
	4,5-Dichloroguaiacol			0	466	0	647.5
	4,6-Dichloroguaiacol			0	466	0	647.5
	4-Bromophenyl-Phenylether			0	4.633333	0	11.8
	4-Chloro-3-methylphenol			0	186.3333	0	259
	4-Chloroguaiacol			0	466	0	647.5
	4-Chlorophenyl-Phenylether			0	4.633333	0	11.8
	9H-Fluorene			0	4.633333	0	11.8
	Acenaphthene			0	9.3	0	23.66667
	Acenaphthylene			0	4.633333	0	11.8
	Aldrin			0	1.966667	0	2
	Alpha-BHC			0	1.966667	0	2
	Alpha-Chlordene			0	1.966667	0	2
	Aluminum			333.3333	1000	400	1066.667
	Anthracene			0	4.633333	0	11.8
	Antimony			0	50	0	50
	Arsenic			353.3333	353.3333	456.6667	456.6667
	Barium			561	561	412.3333	412.3333
	Benzene, 1,2-dichloro-			0	4.633333	0	11.8
	Benzene, 1,3-dichloro-			0	4.633333	0	11.8
	Benzene, 1,4-dichloro-			0	4.633333	0	11.8
	Benzo(a)anthracene			0	4.633333	0	11.8
	Benzo(a)pyrene			0	4.633333	0	11.8
	Benzo(g,h,i)perylene			0	9.3	0	23.66667
	Benzo[b]Fluoranthene			0	4.633333	0	11.8
	Benzo[k]fluoranthene			0	4.633333	0	11.8
	Beryllium			2.1	6.1	4.866667	6.866667
	Beta-BHC			0	1.966667	0	2
	bis(2-Chloroisopropyl)ether			0	9.3	0	23.66667
	Cadmium			7.066667	7.066667	65.66667	65.66667
	Chromium			0	100	170	170
	Chrysene			0	4.633333	0	11.8
	cis-Chlordane (alpha-Chlordane)			0	1.966667	0.533333	1.866667
	cis-Nonachlor			0	1.966667	2.233333	2.233333
	Cobalt			6.3	6.3	180.6667	180.6667
	Copper			850.6667	850.6667	2573.333	2573.333
	DDMU			0	1.966667	2.2	2.2

Appendix E-12. Steelhead station averages at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=DL Egg	DL=0 Fillet+skin	DL=DL Fillet+skin	DL=0 WholeBody	DL=DL WholeBody
	Delta-BHC			0	1.966667	0	2
	Dibenz[a,h]anthracene			0	9.3	0	23.66667
	Dibenzofuran			0	4.633333	0	11.8
	Endosulfan Sulfate			#DIV/0!	#DIV/0!	0	2
	Fluoranthene			0	9.3	0	23.66667
	Gamma-Chlordane			0	1.966667	0	2
	gamma-Chlordene			0	1.966667	0	2
	Heptachlor			0	1.966667	0	2
	Heptachlor Epoxide			0	1.966667	0	2
	Hexachlorobenzene			1.833333	1.833333	2.933333	2.933333
	Hexachlorobutadiene			0	4.633333	0	11.8
	Hexachloroethane			0	4.633333	0	11.8
	Indeno(1,2,3-cd)pyrene			0	9.3	0	23.66667
	Lead			6.666667	13.33333	35.66667	35.66667
	Lindane			0	1.966667	0	2
	Manganese			144	144	518.3333	518.3333
	Mercury			140.6667	140.6667	97.33333	97.33333
	Mirex			0	1.966667	0	2
	Naphthalene			0	15.6	0	40.53333
	Naphthalene, 1-methyl-			0	4.633333	0	11.8
	Naphthalene, 2-methyl-			0	4.633333	0	14.66667
	Nickel			45	45	67	67
	Nitrobenzene			0	4.633333	0	11.8
	n-Nitrosodiphenylamine			#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD			0.000237	0.000237	0.000227	0.000227
	OCDF			0	0.00003	0.00001	0.00002
	Oxychlordane			0	1.966667	0	2
	PCB 105			0.234	0.234	0.280667	0.280667
	PCB 114			0.0236	0.0236	0.027333	0.027333
	PCB 118			0.569333	0.569333	0.665	0.665
	PCB 123			0.0131	0.0131	0.015233	0.015233
	PCB 126			0.004223	0.004223	0.005343	0.005343
	PCB 156			0.053167	0.053167	0.064767	0.064767
	PCB 157			0.014633	0.014633	0.017233	0.017233
	PCB 167			0.034267	0.034267	0.0394	0.0394
	PCB 169			0	0.001	0	0.001187
	PCB 170			0.106267	0.106267	0.123	0.123
	PCB 180			0.317333	0.317333	0.376333	0.376333
	PCB 189			0.003927	0.003927	0.004503	0.004503
	Pentachloroanisol			0	1.966667	0	2
	Pentachlorophenol			0	186.3333	0	259
	Phenanthrene			0	4.766667	0	11.8
	Phenol			0	186.3333	0	259
	Pyrene			0	9.3	0	23.66667
	Retene			0	9.3	0	23.66667
	Selenium			256.6667	256.6667	526.3333	526.3333

Appendix E-12. Steelhead station averages at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=DL Egg	DL=0 Fillet+skin	DL=DL Fillet+skin	DL=0 WholeBody	DL=DL WholeBody
	Silver			0	200	0	200
	Tetrachloroguaiacol			0	186.3333	0	259
	Thallium			0	50	0	50
	Toxaphene			0	58.66667	0	59.66667
	trans-Nonachlor			0	1.966667	3.033333	3.033333
	Vanadium			15	15	56	56
	Zinc			8720	8720	24833.33	24833.33
	Aroclor 1016			0	19.66667	0	20
	Aroclor 1221			0	19.66667	0	20
	Aroclor 1232			0	19.66667	0	20
	Aroclor 1242			0	19.66667	0	20
	Aroclor 1248			0	19.66667	0	20
	Aroclor 1254			16.33333	16.33333	21.66667	21.66667
	Aroclor 1260			0	19.66667	0	20
	PCB 077			0.013867	0.013867	0.016733	0.016733
	DDD-o,p'			0	1.966667	1.833333	1.833333
	DDE-o,p'			0	1.966667	1.833333	1.833333
	DDT-o,p'			0	1.966667	2.066667	2.066667
	DDD-p,p'			4.366667	4.366667	9.066667	9.066667
	DDE-p,p'			14.66667	14.66667	27.66667	27.66667
	DDT-p,p'			2.9	2.9	3.766667	3.766667
Sta. 96	1,2,3,4,6,7,8-HpCDD			0.000137	0.000153	0.000157	0.000163
	1,2,3,4,6,7,8-HpCDF			4.67E-05	0.000085	0.00004	5.33E-05
	1,2,3,4,7,8,9-HpCDF			0	6.83E-05	0.00002	3.33E-05
	1,2,3,4,7,8-HxCDD			0.00004	9.33E-05	0.00009	9.67E-05
	1,2,3,4,7,8-HxCDF			8.33E-06	0.000085	4.67E-05	4.67E-05
	1,2,3,6,7,8-HxCDD			0.000035	8.83E-05	8.67E-05	9.33E-05
	1,2,3,6,7,8-HxCDF			2.67E-05	9.33E-05	7.33E-05	7.33E-05
	1,2,3,7,8,9-HxCDD			8.33E-06	0.00007	0.00002	3.33E-05
	1,2,3,7,8,9-HxCDF			1.17E-05	8.83E-05	0.00005	5.67E-05
	1,2,3,7,8-PeCDD			4.67E-05	8.83E-05	0.00024	0.00024
	1,2,3,7,8-PeCDF			0.000155	0.000155	0.000157	0.000157
	1,2,4-Trichlorobenzene			0	11.3	0	23.96667
	1,2-Diphenylhydrazine			0	11.3	0	23.96667
	2,3,4,6,7,8-HxCDF			0.000138	0.000162	0.000203	0.000203
	2,3,4,6-Tetrachlorophenol			0	258.3333	0	396
	2,3,4,7,8-PeCDF			0.000353	0.000353	0.000337	0.000337
	2,3,7,8-TCDD			3.67E-05	6.33E-05	0.00002	3.33E-05
	2,3,7,8-TCDF			0.000493	0.000493	0.000523	0.000523
	2,4,5-Trichlorophenol			0	258.3333	0	396
	2,4,6-Trichlorophenol			0	258.3333	0	396
	2,4-Dichlorophenol			0	258.3333	0	396
	2,4-Dimethylphenol			0	646	0	990.3333
	2,4-Dinitrotoluene			0	22.58333	0	47.9
	2,6-Dinitrotoluene			0	45.18333	0	95.86667
	2-Chloronaphthalene			0	22.58333	0	47.9

Appendix E-12. Steelhead station averages at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=DL Egg	DL=0 Fillet+skin	DL=DL Fillet+skin	DL=0 WholeBody	DL=DL WholeBody
	2-Chlorophenol			0	258.3333	0	396
	3,4,5-Trichloroguaiacol			0	646	0	990.3333
	3,4,6-Trichloroguaiacol			0	258.3333	0	396
	3,4-Dichloroguaiacol			0	646	0	990.3333
	4,5,6-Trichloroguaiacol			0	646	0	990.3333
	4,5-Dichloroguaiacol			0	646	0	990.3333
	4,6-Dichloroguaiacol			0	646	0	990.3333
	4-Bromophenyl-Phenylether			0	11.3	0	23.96667
	4-Chloro-3-methylphenol			0	258.3333	0	396
	4-Chloroguaiacol			0	646	0	990.3333
	4-Chlorophenyl-Phenylether			0	11.3	0	23.96667
	9H-Fluorene			0	11.3	0	23.96667
	Acenaphthene			0	22.58333	0	47.9
	Acenaphthylene			0	11.3	0	23.96667
	Aldrin			0	2	0	2
	Alpha-BHC			0	2	0	2
	Alpha-Chlordene			0	2	0	2
	Aluminum			2823.333	5490	0	1000
	Anthracene			0	11.3	0	23.96667
	Antimony			0	50	0	50
	Arsenic			457	457	514	514
	Barium			349.1667	415.8333	469	469
	Benzene, 1,2-dichloro-			0	11.3	0	23.96667
	Benzene, 1,3-dichloro-			0	11.3	0	23.96667
	Benzene, 1,4-dichloro-			0	11.3	0	23.96667
	Benzo(a)anthracene			0	11.3	0	23.96667
	Benzo(a)pyrene			0	11.3	0	23.96667
	Benzo(g,h,i)perylene			0	22.58333	0	47.9
	Benzo[b]Fluoranthene			0	11.3	0	23.96667
	Benzo[k]fluoranthene			0	11.3	0	23.96667
	Beryllium			1.016667	4.35	2.133333	6.133333
	Beta-BHC			0	2	0	2
	bis(2-Chloroisopropyl)ether			0	22.58333	0	47.9
	Cadmium			2.783333	4.783333	47.66667	47.66667
	Chromium			0	100	213.3333	213.3333
	Chrysene			0	11.3	0	23.96667
	cis-Chlordane (alpha-Chlordane)			0	2	0.633333	2
	cis-Nonachlor			2.15	2.15	2.233333	2.233333
	Cobalt			6.483333	6.483333	188	188
	Copper			805.3333	805.3333	3110	3110
	DDMU			1.216667	1.566667	1.1	1.733333
	Delta-BHC			0	2	0	2
	Dibenz[a,h]anthracene			0	22.58333	0	47.9
	Dibenzofuran			0	11.3	0	23.96667
	Endosulfan Sulfate			0	2	0	2
	Fluoranthene			0	22.58333	0	47.9

Appendix E-12. Steelhead station averages at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits				DL=0 WholeBody	DL=DL WholeBody
		DL=0 Egg	DL=DL Egg	DL=0 Fillet+skin	DL=DL Fillet+skin		
	Gamma-Chlordane			0	2	0	2
	gamma-Chlordene			0	2	0	2
	Heptachlor			0	2	0	2
	Heptachlor Epoxide			0	2	0	2
	Hexachlorobenzene			2.366667	2.366667	2.866667	2.866667
	Hexachlorobutadiene			0	11.3	0	23.96667
	Hexachloroethane			0	11.3	0	23.96667
	Indeno(1,2,3-cd)pyrene			0	22.58333	0	47.9
	Lead			0	10	75.33333	75.33333
	Lindane			0	2	0	2
	Manganese			183.8333	183.8333	476.6667	476.6667
	Mercury			126.8333	126.8333	203	203
	Mirex			0	2	0	2
	Naphthalene			0	27.26667	0	35.8
	Naphthalene, 1-methyl-			0	11.3	0	23.96667
	Naphthalene, 2-methyl-			0	12.66667	0	23.96667
	Nickel			49.66667	49.66667	52.33333	62.33333
	Nitrobenzene			0	11.3	0	23.96667
	n-Nitrosodiphenylamine			#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD			0.0007	0.0007	0.00055	0.00055
	OCDF			1.33E-05	7.83E-05	0.0001	0.0001
	Oxychlordane			0	2	0	2
	PCB 105			0.318313	0.318313	0.31582	0.31582
	PCB 114			0.030525	0.030525	0.02901	0.02901
	PCB 118			0.785052	0.785052	0.757637	0.757637
	PCB 123			0.010032	0.010032	0.010317	0.010317
	PCB 126			0.005812	0.006058	0.006143	0.006143
	PCB 156			0.077228	0.077228	0.076347	0.076347
	PCB 157			0.020023	0.020023	0.02091	0.02091
	PCB 167			0.046107	0.046107	0.046647	0.046647
	PCB 169			0.000247	0.000858	0	0.001023
	PCB 170			0.147845	0.147845	0.15129	0.15129
	PCB 180			0.410863	0.410863	0.401263	0.401263
	PCB 189			0.006525	0.006525	0.00611	0.00611
	Pentachloroanisol			0	2	0	2
	Pentachlorophenol			0	258.3333	0	396
	Phenanthrene			0	11.3	0	23.96667
	Phenol			0	258.3333	0	396
	Pyrene			0	22.58333	0	47.9
	Retene			0	22.58333	0	47.9
	Selenium			345	345	615	615
	Silver			0	116.6667	0	200
	Tetrachloroguaiacol			0	258.3333	0	396
	Thallium			0	50	0	50
	Toxaphene			0	60.16667	0	60
	trans-Nonachlor			2.766667	2.766667	3.2	3.2

Appendix E-12. Steelhead station averages at full detection limits and with the detection limit set to zero.

Station	Chemical	Detection Limits					
		DL=0 Egg	DL=DL Egg	DL=0 Fillet+skin	DL=DL Fillet+skin	DL=0 WholeBody	DL=DL WholeBody
	Vanadium			22.83333	29.5	128.6667	128.6667
	Zinc			7428.333	7428.333	25000	25000
	Aroclor 1016			0	20	0	20
	Aroclor 1221			0	20	0	20
	Aroclor 1232			0	20	0	20
	Aroclor 1242			0	20	0	20
	Aroclor 1248			0	20	0	20
	Aroclor 1254			18.5	18.5	22.33333	22.33333
	Aroclor 1260			0	20	0	20
	PCB 077			0.01696	0.01696	0.01741	0.01741
	DDD-o,p'			0	2	0	2
	DDE-o,p'			1.5	1.5	1.633333	1.633333
	DDT-o,p'			0	2	0	2
	DDD-p,p'			4.483333	4.483333	5.766667	5.766667
	DDE-p,p'			13.85	13.85	17	17
	DDT-p,p'			4.2	4.2	4.6	4.6

Appendix E-13. Walleye station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0 Fillet+skin	DL=0 WholeBody	DL=DL Fillet+skin	DL=DL WholeBody
Sta. 7	1,2,3,4,6,7,8-HpCDD		0.00012		0.00012
	1,2,3,4,6,7,8-HpCDF		0		0.00002
	1,2,3,4,7,8,9-HpCDF		0		0.00002
	1,2,3,4,7,8-HxCDD		0.00003		0.00003
	1,2,3,4,7,8-HxCDF		0.00003		0.00003
	1,2,3,6,7,8-HxCDD		0.000145		0.000145
	1,2,3,6,7,8-HxCDF		0.000015		0.00002
	1,2,3,7,8,9-HxCDD		0.000045		0.000045
	1,2,3,7,8,9-HxCDF		0		0.00001
	1,2,3,7,8-PeCDD		0.00022		0.00022
	1,2,3,7,8-PeCDF		0.000135		0.000135
	1,2,4-Trichlorobenzene		0		9.75
	1,2-Diphenylhydrazine		0		9.75
	2,3,4,6,7,8-HxCDF		0.00004		0.00004
	2,3,4,6-Tetrachlorophenol		0		390
	2,3,4,7,8-PeCDF		0.00022		0.00022
	2,3,7,8-TCDD		0.00039		0.00039
	2,3,7,8-TCDF		0.004915		0.004915
	2,4,5-Trichlorophenol		0		390
	2,4,6-Trichlorophenol		0		390
	2,4-Dichlorophenol		0		390
	2,4-Dimethylphenol		0		975.5
	2,4-Dinitrotoluene		0		19.5
	2,6-Dinitrotoluene		0		39
	2-Chloronaphthalene		0		19.5
	2-Chlorophenol		0		390
	3,4,5-Trichloroguaiacol		0		975.5
	3,4,6-Trichloroguaiacol		0		390
	3,4-Dichloroguaiacol		0		975.5
	4,5,6-Trichloroguaiacol		0		975.5
	4,5-Dichloroguaiacol		0		975.5
	4,6-Dichloroguaiacol		0		975.5
	4-Bromophenyl-Phenylether		0		9.75
	4-Chloro-3-methylphenol		0		390
	4-Chloroguaiacol		0		975.5
	4-Chlorophenyl-Phenylether		0		9.75
	9H-Fluorene		0		9.75
	Acenaphthene		0		19.5
	Acenaphthylene		0		9.75
	Aldrin		0		1.85
	Alpha-BHC		0		1.85
	Alpha-Chlordene		0		1.85
	Aluminum		0		1000
	Anthracene		0		9.75
	Antimony		0		50
	Arsenic		499		499

Appendix E-13. Walleye station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Barium		749.5		749.5
	Benzene, 1,2-dichloro-		0		9.75
	Benzene, 1,3-dichloro-		0		9.75
	Benzene, 1,4-dichloro-		0		9.75
	Benzo(a)anthracene		0		9.75
	Benzo(a)pyrene		0		9.75
	Benzo(g,h,i)perylene		0		19.5
	Benzo[b]Fluoranthene		0		9.75
	Benzo[k]fluoranthene		0		9.75
	Beryllium		0		4
	Beta-BHC		0		1.85
	bis(2-Chloroisopropyl)ether		0		19.5
	Cadmium		7.45		7.45
	Chromium		110		110
	Chrysene		0		9.75
	cis-Chlordane (alpha-Chlordane)		3.5		3.5
	cis-Nonachlor		3.9		3.9
	Cobalt		74.5		74.5
	Copper		3336		3336
	DDMU		8.1		8.1
	Delta-BHC		0		1.85
	Dibenz[a,h]anthracene		0		19.5
	Dibenzofuran		0		9.75
	Endosulfan Sulfate		0		1.85
	Fluoranthene		0		19.5
	Gamma-Chlordane		4.15		4.15
	Gamma-Chlordene		0		1.85
	Heptachlor		0		1.85
	Heptachlor Epoxide		0		1.85
	Hexachlorobenzene		2.85		2.85
	Hexachlorobutadiene		0		9.75
	Hexachloroethane		0		9.75
	Indeno(1,2,3-cd)pyrene		0		19.5
	Lead		276.5		276.5
	Lindane		0		1.85
	Manganese		971		971
	Mercury		207		207
	Mirex		3.55		3.55
	Naphthalene		0		23.75
	Naphthalene, 1-methyl-		0		9.75
	Naphthalene, 2-methyl-		0		9.75
	Nickel		189.5		189.5
	Nitrobenzene		0		9.75
	n-Nitrosodiphenylamine		#DIV/0!		#DIV/0!
	OCDD		0.000155		0.000155
	OCDF		0		0.00001

Appendix E-13. Walleye station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Oxychlordan		2		2
	PCB 105		4.005		4.005
	PCB 114		0.369		0.369
	PCB 118		7.695		7.695
	PCB 123		0.1549		0.1549
	PCB 126		0.013395		0.013395
	PCB 156		1.71		1.71
	PCB 157		0.335		0.335
	PCB 167		0.5165		0.5165
	PCB 169		0		0.00244
	PCB 170		2.315		2.315
	PCB 180		5.955		5.955
	PCB 189		0.07715		0.07715
	Pentachloroanisol		0		1.85
	Pentachlorophenol		0		390
	Phenanthrene		0		9.75
	Phenol		0		390
	Pyrene		0		19.5
	Retene		0		19.5
	Selenium		505		505
	Silver		0		100
	Tetrachloroguaiacol		0		390
	Thallium		0		50
	Toxaphene		0		55.5
	trans-Nonachlor		8.45		8.45
	Vanadium		11.5		11.5
	Zinc		14350		14350
	PCB 077		0.08575		0.08575
	DDD-o,p'		6.95		6.95
	DDE-o,p'		9.95		9.95
	DDT-o,p'		0		1.85
	DDD-p,p'		54		54
	DDE-p,p'		440		440
	DDT-p,p'		7.85		7.85
	Aroclor 1016		0		18.5
	Aroclor 1221		0		18.5
	Aroclor 1232		0		18.5
	Aroclor 1242		0		18.5
	Aroclor 1248		0		18.5
	Aroclor 1254		76		76
	Aroclor 1260		55		55
Sta. 30	1,2,3,4,6,7,8-HpCDD	6.33E-05	0.00028	6.67E-05	0.00028
	1,2,3,4,6,7,8-HpCDF	0.00004	0.00011	4.33E-05	0.00011
	1,2,3,4,7,8,9-HpCDF	0	0.00004	0.00001	0.00004
	1,2,3,4,7,8-HxCDD	8.67E-05	0.00013	8.67E-05	0.00013
	1,2,3,4,7,8-HxCDF	0	0.00004	0.00001	0.00004

Appendix E-13. Walleye station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	1,2,3,6,7,8-HxCDD	4.67E-05	0.0002	4.67E-05	0.0002
	1,2,3,6,7,8-HxCDF	2.33E-05	0.00005	2.33E-05	0.00005
	1,2,3,7,8,9-HxCDD	1.33E-05	0.00008	1.67E-05	0.00008
	1,2,3,7,8,9-HxCDF	5.33E-05	0.00011	5.33E-05	0.00011
	1,2,3,7,8-PeCDD	7.67E-05	0.00027	0.00008	0.00027
	1,2,3,7,8-PeCDF	3.33E-05	0.00014	3.33E-05	0.00014
	1,2,4-Trichlorobenzene	0	0	6.7	5
	1,2-Diphenylhydrazine	0	0	6.7	5
	2,3,4,6,7,8-HxCDF	0.000123	0.00016	0.000123	0.00016
	2,3,4,7,8-PeCDF	0.00003	0.00019	0.00003	0.00019
	2,3,7,8-TCDD	7.67E-05	0.00038	7.67E-05	0.00038
	2,3,7,8-TCDF	0.000667	0.00382	0.000667	0.00382
	2,4,6-Trichlorophenol	0	0	268.3333	202
	2,4-Dichlorophenol	0	0	268.3333	202
	2,4-Dimethylphenol	0	0	670.8333	505
	2,4-Dinitrotoluene	0	0	13.4	10.1
	2,6-Dinitrotoluene	0	0	26.83333	20.2
	2-Chloronaphthalene	0	0	13.4	10.1
	2-Chlorophenol	0	0	268.3333	202
	3,4,5-Trichloroguaiacol	0	0	670.8333	505
	3,4,6-Trichloroguaiacol	0	0	268.3333	202
	3,4-Dichloroguaiacol	0	0	670.8333	505
	4,5,6-Trichloroguaiacol	0	0	670.8333	505
	4,5-Dichloroguaiacol	0	0	670.8333	505
	4,6-Dichloroguaiacol	0	0	670.8333	505
	4-Bromophenyl-Phenylether	0	0	6.7	5
	4-Chloro-3-methylphenol	0	0	268.3333	202
	4-Chloroguaiacol	0	0	670.8333	505
	4-Chlorophenyl-Phenylether	0	0	6.7	5
	9H-Fluorene	0	0	6.7	5
	Acenaphthene	0	0	13.4	10.1
	Acenaphthylene	0	0	6.7	5
	Aldrin	0	0	1.966667	1.9
	Alpha-BHC	0	0	2.466667	2.4
	Alpha-Chlordene	0	0	2.466667	2.4
	Aluminum	2516.667	6160	2516.667	6160
	Anthracene	0	0	6.7	5
	Antimony	0	0	50	50
	Arsenic	363.3333	480	363.3333	480
	Barium	236.6667	516	236.6667	516
	Benzene, 1,2-dichloro-	0	0	6.7	5
	Benzene, 1,3-dichloro-	0	0	6.7	5
	Benzene, 1,4-dichloro-	0	0	6.7	5
	Benzo(a)anthracene	0	0	6.7	5
	Benzo(a)pyrene	0	0	6.7	5
	Benzo(g,h,i)perylene	0	0	13.4	10.1

Appendix E-13. Walleye station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	Benzo[b]Fluoranthene	0	0	6.7	5
	Benzo[k]fluoranthene	0	0	6.7	5
	Beryllium	0	0	4	4
	Beta-BHC	0	0	2.466667	2.4
	bis(2-Chloroisopropyl)ether	0	0	13.4	10.1
	Cadmium	0	7.4	4	7.4
	Chromium	73.33333	120	106.6667	120
	Chrysene	0	0	6.7	5
	cis-Chlordane (alpha-Chlordane)	0	5.8	2.466667	5.8
	cis-Nonachlor	0	0	2.466667	2.4
	Cobalt	8.333333	19	8.333333	19
	Copper	568	731	568	731
	Delta-BHC	0	0	2.466667	2.4
	Dibenz[a,h]anthracene	0	0	13.4	10.1
	Dibenzofuran	0	0	6.7	5
	Endosulfan Sulfate	0	0	2.466667	2.4
	Fluoranthene	0	0	13.4	10.1
	Gamma-Chlordane	0	3.6	2.466667	3.6
	Gamma-Chlordene	0	0	2.466667	2.4
	Heptachlor	0	0	1.966667	1.9
	Heptachlor Epoxide	0	0	2.466667	2.4
	Hexachlorobenzene	0	0	2.466667	2.4
	Hexachlorobutadiene	0	0	6.7	5
	Hexachloroethane	0	0	6.7	5
	Indeno(1,2,3-cd)pyrene	0	0	13.4	10.1
	Lead	0	0	10	10
	Lindane	0	0	2.466667	2.4
	Manganese	366.6667	897	366.6667	897
	Mercury	175.3333	120	175.3333	120
	Mirex	0	0	2.466667	2.4
	Naphthalene	0	0	9.3	16
	Naphthalene, 1-methyl-	0	7.7	6.7	7.7
	Naphthalene, 2-methyl-	4.533333	16	7.733333	16
	Nickel	263.3333	399	263.3333	399
	Nitrobenzene	0	0	6.7	5
	n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	9.67E-05	0.00032	0.0001	0.00032
	OCDF	0	0.0001	0.00001	0.0001
	Oxychlordane	0	1.7	2.466667	1.7
	PCB 105	0.334667	1.23	0.334667	1.23
	PCB 114	0.026833	0.126	0.026833	0.126
	PCB 118	0.663333	2.63	0.663333	2.63
	PCB 123	0.013933	0.0513	0.013933	0.0513
	PCB 126	0	0	0.00069	0.001
	PCB 156	0.122333	0.8	0.122333	0.8
	PCB 157	0	0	0.00114	0.00167

Appendix E-13. Walleye station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet+skin	WholeBody	Fillet+skin	WholeBody
	PCB 167	0.042567	0.322	0.042567	0.322
	PCB 169	0	0	0.000583	0.00491
	PCB 170	0.22	0.965	0.22	0.965
	PCB 180	0.726	2.78	0.726	2.78
	PCB 189	0.006827	0.0532	0.006827	0.0532
	Pentachloroanisol	0	1.2	2.466667	1.2
	Pentachlorophenol	0	0	268.3333	202
	Phenanthrene	0	0	6.7	5
	Phenol	0	0	268.3333	202
	Pyrene	0	0	13.4	10.1
	Retene	0	0	13.4	10.1
	Selenium	390	410	390	410
	Silver	0	0	100	100
	Tetrachloroguaiacol	0	0	268.3333	202
	Thallium	22.66667	0	56	50
	Toxaphene	0	0	73.66667	72
	trans-Nonachlor	0	3	2.466667	3
	Vanadium	0	20	10	20
	Zinc	8713.333	13400	8713.333	13400
	PCB 077	0.0135	0.0743	0.0135	0.0743
	DDD-o,p'	0	5.8	2.466667	5.8
	DDE-o,p'	0	6.8	2.566667	6.8
	DDT-o,p'	0	0	2.466667	2.4
	DDD-p,p'	6.666667	50	6.666667	50
	DDE-p,p'	47	350	47	350
	DDT-p,p'	1.566667	12	2.4	12
	Aroclor 1016	0	0	13.66667	19
	Aroclor 1221	0	0	13.66667	19
	Aroclor 1232	0	0	13.66667	19
	Aroclor 1242	0	0	13.66667	19
	Aroclor 1248	0	0	13.66667	19
	Aroclor 1254	12.66667	71	12.66667	71
	Aroclor 1260	0	47	19.66667	47

Appendix E-14. White sturgeon station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet w/o skin	WholeBody	Fillet w/o skin	WholeBody
Sta. 6	1,2,3,4,6,7,8-HpCDD	0.000211667		0.000211667	
	1,2,3,4,6,7,8-HpCDF	0.000085		0.000085	
	1,2,3,4,7,8,9-HpCDF	1.33333E-05		1.83333E-05	
	1,2,3,4,7,8-HxCDD	0.000115		0.000115	
	1,2,3,4,7,8-HxCDF	0.00004		0.00004	
	1,2,3,6,7,8-HxCDD	0.000123333		0.000123333	
	1,2,3,6,7,8-HxCDF	0.00006		0.00006	
	1,2,3,7,8,9-HxCDD	0.000075		0.000075	
	1,2,3,7,8,9-HxCDF	9.66667E-05		9.66667E-05	
	1,2,3,7,8-PeCDD	0.00008		0.000085	
	1,2,3,7,8-PeCDF	0.000243333		0.000243333	
	1,2,4-Trichlorobenzene	0		8.166666667	
	1,2-Diphenylhydrazine	0		8.166666667	
	2,3,4,6,7,8-HxCDF	0.000136667		0.000136667	
	2,3,4,6-Tetrachlorophenol	0		192	
	2,3,4,7,8-PeCDF	0.000181667		0.000181667	
	2,3,7,8-TCDD	0.000305		0.000305	
	2,3,7,8-TCDF	0.015653333		0.015653333	
	2,4,5-Trichlorophenol	0		190	
	2,4,6-Trichlorophenol	0		193.3333333	
	2,4-Dichlorophenol	0		193.3333333	
	2,4-Dimethylphenol	0		483.3333333	
	2,4-Dinitrotoluene	0		16.4	
	2,6-Dinitrotoluene	0		32.8	
	2-Chloronaphthalene	0		12.18333333	
	2-Chlorophenol	0		193.3333333	
	3,4,5-Trichloroguaiacol	0		483.3333333	
	3,4,6-Trichloroguaiacol	0		193.3333333	
	3,4-Dichloroguaiacol	0		483.3333333	
	4,5,6-Trichloroguaiacol	0		483.3333333	
	4,5-Dichloroguaiacol	0		483.3333333	
	4,6-Dichloroguaiacol	0		483.3333333	
	4-Bromophenyl-Phenylether	0		8.166666667	
	4-Chloro-3-methylphenol	0		193.3333333	
	4-Chloroguaiacol	0		483.3333333	
	4-Chlorophenyl-Phenylether	0		8.166666667	
	9H-Fluorene	0		8.166666667	
	Acenaphthene	0		16.4	
	Acenaphthylene	0		8.166666667	
	Aldrin	0		1.85	
	Alpha-BHC	0		1.85	
	Alpha-Chlordene	0		1.85	
	Aluminum	0		17500	
	Anthracene	0		8.166666667	
	Antimony	0		50	
	Arsenic	308.3333333		308.3333333	

Appendix E-14. White sturgeon station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet w/o skin	WholeBody	Fillet w/o skin	WholeBody
	Barium		55	221.6666667	
	Benzene, 1,2-dichloro-		0	8.166666667	
	Benzene, 1,3-dichloro-		0	8.166666667	
	Benzene, 1,4-dichloro-		0	8.166666667	
	Benzo(a)anthracene		0	8.166666667	
	Benzo(a)pyrene		0	14.4	
	Benzo(g,h,i)perylene		0	28.83333333	
	Benzo[b]Fluoranthene		0	18.61666667	
	Benzo[k]fluoranthene		0	18.61666667	
	Beryllium		0	4	
	Beta-BHC		0	1.85	
	bis(2-Chloroisopropyl)ether		0	16.4	
	Cadmium		0	4	
	Chromium		0	100	
	Chrysene		0	8.166666667	
	cis-Chlordane (alpha-Chlordane)	2.3		2.583333333	
	cis-Nonachlor	4.616666667		4.9	
	Cobalt	3.983333333		3.983333333	
	Copper	183.3333333		225	
	DDMU	7.5		7.5	
	Delta-BHC		0	1.85	
	Dibenz[a,h]anthracene		0	28.83333333	
	Dibenzofuran		0	8.166666667	
	Endosulfan Sulfate		0	1.85	
	Fluoranthene		0	16.4	
	Gamma-Chlordane	3.6		3.6	
	Gamma-Chlordene		0	1.85	
	Heptachlor		0	1.85	
	Heptachlor Epoxide	0.2		1.766666667	
	Hexachlorobenzene	2.266666667		2.266666667	
	Hexachlorobutadiene		0	8.166666667	
	Hexachloroethane		0	8.166666667	
	Indeno(1,2,3-cd)pyrene		0	28.83333333	
	Lead		15	18.33333333	
	Lindane		0	1.85	
	Manganese	285		285	
	Mercury	119		119	
	Mirex		0	1.85	
	Naphthalene		0	21.98333333	
	Naphthalene, 1-methyl-		0	8.166666667	
	Naphthalene, 2-methyl-		0	8.483333333	
	Nickel	10.33333333		35.33333333	
	Nitrobenzene		0	8.166666667	
	n-Nitrosodiphenylamine	#DIV/0!		#DIV/0!	
	OCDD	0.000348333		0.000348333	
	OCDF	0.00006		0.00006	

Appendix E-14. White sturgeon station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet w/o skin	WholeBody	Fillet w/o skin	WholeBody
	Oxychlorane	0		1.883333333	
	PCB 105	1.996666667		1.996666667	
	PCB 114	0.155346667		0.155346667	
	PCB 118	2.118333333		2.118333333	
	PCB 123	0.021496667		0.021496667	
	PCB 126	0		0.001915	
	PCB 156	0.593688333		0.593688333	
	PCB 157	0.125983333		0.125983333	
	PCB 167	0		0.005416667	
	PCB 169	0		0.00102	
	PCB 170	0.83289		0.83289	
	PCB 180	3.125		3.125	
	PCB 189	0.03464		0.03464	
	Pentachloroanisole	0		1.85	
	Pentachlorophenol	0		193.3333333	
	Phenanthrene	0		8.7	
	Phenol	0		193.3333333	
	Pyrene	0		16.4	
	Retene	0		16.4	
	Selenium	386.6666667		386.6666667	
	Silver	0		100	
	Tetrachloroguaiacol	0		193.3333333	
	Thallium	0		50	
	Toxaphene	0		55	
	trans-Nonachlor	6.266666667		6.266666667	
	Vanadium	12		15.33333333	
	Zinc	4068.333333		4068.333333	
	DDD-o,p'	5.433333333		5.433333333	
	DDE-o,p'	4.9		4.9	
	DDT-o,p'	3.95		3.95	
	DDD-p,p'	46.16666667		46.16666667	
	DDE-p,p'	396.6666667		396.6666667	
	DDT-p,p'	2.85		2.85	
	PCB 077	0.014916667		0.014916667	
	Aroclor 1016	0		18.5	
	Aroclor 1221	0		18.5	
	Aroclor 1232	0		18.5	
	Aroclor 1242	0		18.5	
	Aroclor 1248	0		18.5	
	Aroclor 1254	62.16666667		62.16666667	
	Aroclor 1260	34.83333333		34.83333333	
Sta. 7	1,2,3,4,6,7,8-HpCDD	0.00027		0.00027	
	1,2,3,4,6,7,8-HpCDF	9.66667E-05		9.66667E-05	
	1,2,3,4,7,8,9-HpCDF	3.33333E-05		3.66667E-05	
	1,2,3,4,7,8-HxCDD	0.000126667		0.000126667	
	1,2,3,4,7,8-HxCDF	4.33333E-05		4.33333E-05	

Appendix E-14. White sturgeon station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet w/o skin	WholeBody	Fillet w/o skin	WholeBody
	1,2,3,6,7,8-HxCDD	0.000103333		0.000113333	
	1,2,3,6,7,8-HxCDF	6.66667E-05		6.66667E-05	
	1,2,3,7,8,9-HxCDD	0.00006		6.33333E-05	
	1,2,3,7,8,9-HxCDF	9.33333E-05		9.33333E-05	
	1,2,3,7,8-PeCDD	0.000143333		0.000143333	
	1,2,3,7,8-PeCDF	0.0002		0.0002	
	1,2,4-Trichlorobenzene	0		4.833333333	
	1,2-Diphenylhydrazine	0		4.833333333	
	2,3,4,6,7,8-HxCDF	0.00015		0.00015	
	2,3,4,6-Tetrachlorophenol	0		193.3333333	
	2,3,4,7,8-PeCDF	0.000173333		0.000173333	
	2,3,7,8-TCDD	0.000323333		0.000323333	
	2,3,7,8-TCDF	0.011866667		0.011866667	
	2,4,5-Trichlorophenol	0		193.3333333	
	2,4,6-Trichlorophenol	0		193.3333333	
	2,4-Dichlorophenol	0		193.3333333	
	2,4-Dimethylphenol	0		483.3333333	
	2,4-Dinitrotoluene	0		9.633333333	
	2,6-Dinitrotoluene	0		19.33333333	
	2-Chloronaphthalene	0		9.633333333	
	2-Chlorophenol	0		193.3333333	
	3,4,5-Trichloroguaiacol	0		483.3333333	
	3,4,6-Trichloroguaiacol	0		193.3333333	
	3,4-Dichloroguaiacol	0		483.3333333	
	4,5,6-Trichloroguaiacol	0		483.3333333	
	4,5-Dichloroguaiacol	0		483.3333333	
	4,6-Dichloroguaiacol	0		483.3333333	
	4-Bromophenyl-Phenylether	0		4.833333333	
	4-Chloro-3-methylphenol	0		193.3333333	
	4-Chloroguaiacol	0		483.3333333	
	4-Chlorophenyl-Phenylether	0		4.833333333	
	9H-Fluorene	0		4.833333333	
	Acenaphthene	0		9.633333333	
	Acenaphthylene	0		4.833333333	
	Aldrin	0		1.9	
	Alpha-BHC	0		1.9	
	Alpha-Chlordene	0		1.9	
	Aluminum	0		15000	
	Anthracene	0		4.833333333	
	Antimony	0		50	
	Arsenic	344		344	
	Barium	211.3333333		344.6666667	
	Benzene, 1,2-dichloro-	0		4.833333333	
	Benzene, 1,3-dichloro-	0		4.833333333	
	Benzene, 1,4-dichloro-	0		4.833333333	
	Benzo(a)anthracene	0		11.53333333	

Appendix E-14. White sturgeon station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet w/o skin	WholeBody	Fillet w/o skin	WholeBody
	Benzo(a)pyrene		0	11.53333333	
	Benzo(g,h,i)perylene		0	23.03333333	
	Benzo[b]Fluoranthene		0	11.53333333	
	Benzo[k]fluoranthene		0	11.53333333	
	Beryllium		0		4
	Beta-BHC		0		1.9
	bis(2-Chloroisopropyl)ether		0	9.63333333	
	Cadmium		0		4
	Chromium		0		100
	Chrysene		0	11.53333333	
	cis-Chlordane (alpha-Chlordane)	2.66666667		3.96666667	
	cis-Nonachlor	3.96666667		4.63333333	
	Cobalt	5.13333333		5.46666667	
	Copper	280		280	
	DDMU	5.26666667		5.26666667	
	Delta-BHC		0		1.9
	Dibenz[a,h]anthracene		0	23.03333333	
	Dibenzofuran		0	4.83333333	
	Endosulfan Sulfate		0		1.9
	Fluoranthene		0	9.63333333	
	Gamma-Chlordane	3.43333333		4.1	
	Gamma-Chlordene		0		1.9
	Heptachlor		0		1.9
	Heptachlor Epoxide		0		1.9
	Hexachlorobenzene	3.93333333		3.93333333	
	Hexachlorobutadiene		0	4.83333333	
	Hexachloroethane		0	4.83333333	
	Indeno(1,2,3-cd)pyrene		0	23.03333333	
	Lead	3.33333333		10	
	Lindane		0		1.9
	Manganese	275.333333		275.333333	
	Mercury	95.66666667		124.666667	
	Mirex		0		1.9
	Naphthalene		0		26.7
	Naphthalene, 1-methyl-		0	4.83333333	
	Naphthalene, 2-methyl-		0	6.26666667	
	Nickel	10.66666667		30.66666667	
	Nitrobenzene		0	4.83333333	
	n-Nitrosodiphenylamine	#DIV/0!		#DIV/0!	
	OCDD	0.00049667		0.00049667	
	OCDF	2.66667E-05		0.00004	
	Oxychlordane		0		1.9
	PCB 105	1.14830667		1.14830667	
	PCB 114	0.09513		0.09513	
	PCB 118	1.31304667		1.31304667	
	PCB 123	0.01370933		0.01370933	

Appendix E-14. White sturgeon station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet w/o skin	WholeBody	Fillet w/o skin	WholeBody
	PCB 126	0.000856667		0.001633333	
	PCB 156	0.355113333		0.355113333	
	PCB 157	0.070936667		0.070936667	
	PCB 167	0.007163333		0.00976	
	PCB 169	0		0.001	
	PCB 170	0.705173333		0.705173333	
	PCB 180	2.31		2.31	
	PCB 189	0.02728		0.02728	
	Pentachloroanisol	0		1.9	
	Pentachlorophenol	0		193.3333333	
	Phenanthrene	0		5.633333333	
	Phenol	0		193.3333333	
	Pyrene	0		23.03333333	
	Retene	0		23.03333333	
	Selenium	1187.666667		1187.666667	
	Silver	0		100	
	Tetrachloroguaiacol	0		193.3333333	
	Thallium	0		50	
	Toxaphene	0		56	
	trans-Nonachlor	4.4		5.066666667	
	Vanadium	4		14	
	Zinc	3850		3850	
	DDD-o,p'	7.4		7.4	
	DDE-o,p'	2.766666667		3.433333333	
	DDT-o,p'	2.533333333		3.2	
	DDD-p,p'	44.66666667		44.66666667	
	DDE-p,p'	310		310	
	DDT-p,p'	2.5		3.166666667	
	PCB 077	0.008773333		0.008773333	
	Aroclor 1016	0		19	
	Aroclor 1221	0		19	
	Aroclor 1232	0		19	
	Aroclor 1242	0		19	
	Aroclor 1248	0		19	
	Aroclor 1254	29.66666667		29.66666667	
	Aroclor 1260	28.66666667		28.66666667	
Sta. 8	1,2,3,4,6,7,8-HpCDD	0.000406667	0.0004267	0.000406667	0.00042667
	1,2,3,4,6,7,8-HpCDF	0.000106667	0.0001	0.000106667	0.00011
	1,2,3,4,7,8,9-HpCDF	0	1.667E-05	3.33333E-05	3.6667E-05
	1,2,3,4,7,8-HxCDD	0.000133333	8.333E-05	0.000133333	8.6667E-05
	1,2,3,4,7,8-HxCDF	2.66667E-05	0.00005	4.33333E-05	0.00005
	1,2,3,6,7,8-HxCDD	0.00014	0.0001633	0.000166667	0.00017
	1,2,3,6,7,8-HxCDF	0.00005	5.667E-05	6.66667E-05	6.3333E-05
	1,2,3,7,8,9-HxCDD	3.66667E-05	0.00004	6.33333E-05	4.6667E-05
	1,2,3,7,8,9-HxCDF	0.00002	0.00006	0.00004	0.00006
	1,2,3,7,8-PeCDD	0.000153333	5.667E-05	0.000153333	6.3333E-05

Appendix E-14. White sturgeon station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet w/o skin	WholeBody	Fillet w/o skin	WholeBody
	1,2,3,7,8-PeCDF	0.000243333	0.0003267	0.000243333	0.00032667
	1,2,4-Trichlorobenzene	0	0	4.866666667	25.1666667
	1,2-Diphenylhydrazine	0	0	4.866666667	25.1666667
	2,3,4,6,7,8-HxCDF	0.000153333	0.0001267	0.000153333	0.00013333
	2,3,4,6-Tetrachlorophenol	0	0	195	331.666667
	2,3,4,7,8-PeCDF	0.000213333	0.0002867	0.000213333	0.00028667
	2,3,7,8-TCDD	0.000433333	0.0006133	0.000433333	0.00061333
	2,3,7,8-TCDF	0.016316667	0.0184067	0.016316667	0.01840667
	2,4,5-Trichlorophenol	0	0	195	331.666667
	2,4,6-Trichlorophenol	0	0	195	331.666667
	2,4-Dichlorophenol	0	0	195	331.666667
	2,4-Dimethylphenol	0	0	487.5	829.333333
	2,4-Dinitrotoluene	0	0	9.766666667	50.2666667
	2,6-Dinitrotoluene	0	0	19.5	100.366667
	2-Chloronaphthalene	0	0	9.766666667	50.2666667
	2-Chlorophenol	0	0	195	331.666667
	3,4,5-Trichloroguaiacol	0	0	487.5	829.333333
	3,4,6-Trichloroguaiacol	0	0	195	331.666667
	3,4-Dichloroguaiacol	0	0	487.5	829.333333
	4,5,6-Trichloroguaiacol	0	0	487.5	829.333333
	4,5-Dichloroguaiacol	0	0	487.5	829.333333
	4,6-Dichloroguaiacol	0	0	487.5	829.333333
	4-Bromophenyl-Phenylether	0	0	4.866666667	25.1666667
	4-Chloro-3-methylphenol	0	0	195	331.666667
	4-Chloroguaiacol	0	0	487.5	829.333333
	4-Chlorophenyl-Phenylether	0	0	4.866666667	25.1666667
	9H-Fluorene	0	0	4.866666667	25.1666667
	Acenaphthene	0	0	9.766666667	50.2666667
	Acenaphthylene	0	0	4.866666667	25.1666667
	Aldrin	0	0	1.866666667	1.96666667
	Alpha-BHC	0	0	1.866666667	1.96666667
	Alpha-Chlordene	0	0	1.866666667	1.96666667
	Aluminum	0	70886.667	5000	70886.6667
	Anthracene	0	0	4.866666667	25.1666667
	Antimony	0	0	50	200
	Arsenic	343.3333333	416	343.3333333	582.666667
	Barium	390	1936.6667	390	1936.6667
	Benzene, 1,2-dichloro-	0	0	4.866666667	25.1666667
	Benzene, 1,3-dichloro-	0	0	4.866666667	25.1666667
	Benzene, 1,4-dichloro-	0	0	4.866666667	25.1666667
	Benzo(a)anthracene	0	0	4.866666667	25.1666667
	Benzo(a)pyrene	0	0	4.866666667	25.1666667
	Benzo(g,h,i)perylene	0	0	9.766666667	50.2666667
	Benzo[b]Fluoranthene	0	0	4.866666667	25.1666667
	Benzo[k]fluoranthene	0	0	4.866666667	25.1666667
	Beryllium	0	5.7333333	4	25.7333333

Appendix E-14. White sturgeon station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet w/o skin	WholeBody	Fillet w/o skin	WholeBody
	Beta-BHC	0	0	1.866666667	1.966666667
	bis(2-Chloroisopropyl)ether	0	0	9.766666667	50.26666667
	Cadmium	0	47	4	47
	Chromium	0	136.66667	100	470
	Chrysene	0	0	4.866666667	25.1666667
	cis-Chlordane (alpha-Chlordane)	0	2.3666667	1.866666667	3.03333333
	cis-Nonachlor	3.4	6.93333333	4	6.93333333
	Cobalt	6.366666667	284.33333	6.366666667	284.333333
	Copper	136.6666667	1008.3333	323.3333333	1008.33333
	DDMU	5.266666667	3.6666667	5.266666667	4.96666667
	Delta-BHC	0	0	1.866666667	1.966666667
	Dibenz[a,h]anthracene	0	0	9.766666667	50.2666667
	Dibenzofuran	0	0	4.866666667	25.1666667
	Endosulfan Sulfate	0	0	1.866666667	1.966666667
	Fluoranthene	0	0	9.766666667	50.2666667
	Gamma-Chlordane	2.2	5.6666667	2.8	5.66666667
	Gamma-Chlordene	0	0	1.866666667	1.966666667
	Heptachlor	0	0	1.866666667	1.966666667
	Heptachlor Epoxide	0	0	1.866666667	1.966666667
	Hexachlorobenzene	5.6	6.1	5.6	6.1
	Hexachlorobutadiene	0	0	4.866666667	25.1666667
	Hexachloroethane	0	0	4.866666667	25.1666667
	Indeno(1,2,3-cd)pyrene	0	0	9.766666667	50.2666667
	Lead	0	184.66667	10	184.666667
	Lindane	0	0	1.866666667	1.966666667
	Manganese	252.6666667	2983.3333	252.6666667	2983.33333
	Mercury	44.33333333	171	57	171
	Mirex	0	0	1.866666667	1.966666667
	Naphthalene	0	0	33.9	32.7
	Naphthalene, 1-methyl-	3.433333333	0	6.666666667	25.2333333
	Naphthalene, 2-methyl-	8.333333333	0	12.13333333	27
	Nickel	58	152	58	152
	Nitrobenzene	0	0	4.866666667	25.1666667
	n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	0.00059	0.00085	0.00059	0.00085
	OCDF	3.33333E-05	0.00006	4.66667E-05	0.00007
	Oxychlordane	0	0	1.866666667	1.966666667
	PCB 105	1.195646667	4.4033333	1.195646667	4.40333333
	PCB 114	0.10017	0.3506667	0.10017	0.35066667
	PCB 118	1.103016667	5.23	1.103016667	5.23
	PCB 123	0.01457	0.0286667	0.01457	0.02866667
	PCB 126	0	0	0.00202	0.00243
	PCB 156	0.45252	1.7043333	0.45252	1.70433333
	PCB 157	0.081623333	0.3116667	0.081623333	0.31166667
	PCB 167	0.009643333	0.0599333	0.01142	0.05993333
	PCB 169	0	0.0005567	0.000543333	0.00346

Appendix E-14. White sturgeon station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet w/o skin	WholeBody	Fillet w/o skin	WholeBody
	PCB 170	1.052716667	3.3933333	1.052716667	3.393333333
	PCB 180	3.23	11.61	3.23	11.61
	PCB 189	0.04024	0.1284667	0.04024	0.12846667
	Pentachloroanisol	0	0	1.866666667	1.96666667
	Pentachlorophenol	0	0	195	331.666667
	Phenanthrene	0	0	5.8	25.1666667
	Phenol	0	178	195	443
	Pyrene	0	0	9.766666667	50.2666667
	Retene	0	0	9.766666667	50.2666667
	Selenium	1336.666667	347.66667	1336.66667	681
	Silver	0	0	100	800
	Tetrachloroguaiacol	0	0	195	331.666667
	Thallium	0	0	50	200
	Toxaphene	0	0	56.33333333	58.6666667
	trans-Nonachlor	4.433333333	6	4.433333333	7.3
	Vanadium	0	278.33333	20	278.333333
	Zinc	2906.666667	9126.6667	2906.66667	9126.66667
	DDD-o,p'	8	6.6	8	6.6
	DDE-o,p'	3.666666667	8.9	3.666666667	8.9
	DDT-o,p'	2.2	3.1666667	2.8	3.83333333
	DDD-p,p'	45.33333333	104.33333	45.33333333	104.333333
	DDE-p,p'	336.6666667	753.33333	336.6666667	753.333333
	DDT-p,p'	3.7	25.333333	3.7	25.3333333
	PCB 077	0.006596667	0.01141	0.006596667	0.01141
	Aroclor 1016	0	0	18.66666667	19.6666667
	Aroclor 1221	0	0	18.66666667	19.6666667
	Aroclor 1232	0	0	18.66666667	19.6666667
	Aroclor 1242	0	0	18.66666667	19.6666667
	Aroclor 1248	0	0	18.66666667	19.6666667
	Aroclor 1254	30	82.333333	30	82.3333333
	Aroclor 1260	39.66666667	117.66667	39.66666667	117.666667
Sta. 13	1,2,3,4,6,7,8-HpCDD	0.000276667		0.00028	
	1,2,3,4,6,7,8-HpCDF	0.000106667		0.000106667	
	1,2,3,4,7,8,9-HpCDF	0		0.00002	
	1,2,3,4,7,8-HxCDD	4.16667E-05		0.000055	
	1,2,3,4,7,8-HxCDF	6.16667E-05		6.16667E-05	
	1,2,3,6,7,8-HxCDD	0.000205		0.000206667	
	1,2,3,6,7,8-HxCDF	6.16667E-05		6.16667E-05	
	1,2,3,7,8,9-HxCDD	2.83333E-05		3.83333E-05	
	1,2,3,7,8,9-HxCDF	0.00001		0.000025	
	1,2,3,7,8-PeCDD	0.000105		0.000106667	
	1,2,3,7,8-PeCDF	0.000146667		0.000146667	
	1,2,4-Trichlorobenzene	0		7.683333333	
	1,2-Diphenylhydrazine	0		7.683333333	
	2,3,4,6,7,8-HxCDF	6.16667E-05		6.83333E-05	
	2,3,4,6-Tetrachlorophenol	0		337.8333333	

Appendix E-14. White sturgeon station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet w/o skin	WholeBody	Fillet w/o skin	WholeBody
	2,3,4,7,8-PeCDF	0.00005		6.83333E-05	
	2,3,7,8-TCDD	0.00035		0.000351667	
	2,3,7,8-TCDF	0.004173333		0.004173333	
	2,4,5-Trichlorophenol	0		327.8333333	
	2,4,6-Trichlorophenol	0		327.8333333	
	2,4-Dichlorophenol	0		337.8333333	
	2,4-Dimethylphenol	0		844.75	
	2,4-Dinitrotoluene	0		15.43333333	
	2,6-Dinitrotoluene	0		30.81666667	
	2-Chloronaphthalene	0		15.43333333	
	2-Chlorophenol	0		337.8333333	
	3,4,5-Trichloroguaiacol	0		844.75	
	3,4,6-Trichloroguaiacol	0		337.8333333	
	3,4-Dichloroguaiacol	0		844.75	
	4,5,6-Trichloroguaiacol	0		844.75	
	4,5-Dichloroguaiacol	0		844.75	
	4,6-Dichloroguaiacol	0		844.75	
	4-Bromophenyl-Phenylether	0		7.683333333	
	4-Chloro-3-methylphenol	0		337.8333333	
	4-Chloroguaiacol	0		844.75	
	4-Chlorophenyl-Phenylether	0		7.683333333	
	9H-Fluorene	0		7.683333333	
	Acenaphthene	0		15.43333333	
	Acenaphthylene	0		7.683333333	
	Aldrin	0		1.933333333	
	Alpha-BHC	0		1.933333333	
	Alpha-Chlordene	0.45		2.05	
	Aluminum	0		1000	
	Anthracene	0		7.683333333	
	Antimony	0		50	
	Arsenic	198.3333333		198.3333333	
	Barium	96.66666667		230	
	Benzene, 1,2-dichloro-	0		7.683333333	
	Benzene, 1,3-dichloro-	0		7.683333333	
	Benzene, 1,4-dichloro-	0		7.683333333	
	Benzo(a)anthracene	0		7.683333333	
	Benzo(a)pyrene	0		7.683333333	
	Benzo(g,h,i)perylene	0		15.43333333	
	Benzo[b]Fluoranthene	0		7.683333333	
	Benzo[k]fluoranthene	0		7.683333333	
	Beryllium	1.466666667		5.133333333	
	Beta-BHC	0		1.933333333	
	bis(2-Chloroisopropyl)ether	0		15.43333333	
	Cadmium	1.166666667		4.5	
	Chromium	0		100	
	Chrysene	0		7.683333333	

Appendix E-14. White sturgeon station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet w/o skin	WholeBody	Fillet w/o skin	WholeBody
	cis-Chlordane (alpha-Chlordane)	4.583333333		5.216666667	
	cis-Nonachlor	8.15		8.783333333	
	Cobalt	27.56666667		27.56666667	
	Copper	300		300	
	DDMU	8.883333333		8.883333333	
	Delta-BHC	0		1.933333333	
	Dibenz[a,h]anthracene	0		15.43333333	
	Dibenzofuran	0		7.683333333	
	Endosulfan Sulfate	0		2	
	Fluoranthene	0		15.43333333	
	Gamma-Chlordane	1.983333333		1.983333333	
	Gamma-Chlordene	0		1.933333333	
	Heptachlor	0		1.933333333	
	Heptachlor Epoxide	0		2	
	Hexachlorobenzene	4.616666667		4.616666667	
	Hexachlorobutadiene	0		7.683333333	
	Hexachloroethane	0		7.683333333	
	Indeno(1,2,3-cd)pyrene	0		15.43333333	
	Lead	0		10	
	Lindane	0		1.933333333	
	Manganese	267		267	
	Mercury	305.6666667		305.6666667	
	Mirex	0		1.933333333	
	Naphthalene	0		21.01666667	
	Naphthalene, 1-methyl-	0		7.683333333	
	Naphthalene, 2-methyl-	0		8.083333333	
	Nickel	165.5		170.5	
	Nitrobenzene	0		7.683333333	
	n-Nitrosodiphenylamine	#DIV/0!		#DIV/0!	
	OCDD	0.000608333		0.000608333	
	OCDF	8.33333E-06		1.66667E-05	
	Oxychlordane	0		1.933333333	
	PCB 105	1.775333333		1.775333333	
	PCB 114	0.180433333		0.180433333	
	PCB 118	2.878		2.878	
	PCB 123	0.034316667		0.034316667	
	PCB 126	0		0.00313	
	PCB 156	0.7225		0.7225	
	PCB 157	0.131		0.131	
	PCB 167	0.071566667		0.071566667	
	PCB 169	0		0.001646667	
	PCB 170	1.32		1.32	
	PCB 180	4.245		4.245	
	PCB 189	0.053316667		0.053316667	
	Pentachloroanisol	0		1.933333333	
	Pentachlorophenol	0		337.8333333	

Appendix E-14. White sturgeon station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet w/o skin	WholeBody	Fillet w/o skin	WholeBody
	Phenanthrene	0		7.683333333	
	Phenol	0		337.8333333	
	Pyrene	0		15.43333333	
	Retene	0		15.43333333	
	Selenium	702.6666667		702.6666667	
	Silver	0		133.3333333	
	Tetrachloroguaiacol	0		337.8333333	
	Thallium	0			50
	Toxaphene	0		57.83333333	
	trans-Nonachlor	7.083333333		7.716666667	
	Vanadium	1.666666667			10
	Zinc	4591.666667		4591.666667	
	DDD-o,p'	5.8			5.8
	DDE-o,p'	5.983333333		5.983333333	
	DDT-o,p'	3.75		4.383333333	
	DDD-p,p'	38.5			38.5
	DDE-p,p'	440			440
	DDT-p,p'	22.5			22.5
	PCB 077	0.016173333		0.016173333	
	Aroclor 1016	0		19.33333333	
	Aroclor 1221	0		19.33333333	
	Aroclor 1232	0		19.33333333	
	Aroclor 1242	0		19.33333333	
	Aroclor 1248	0		19.33333333	
	Aroclor 1254	38.33333333		38.33333333	
	Aroclor 1260	36		42.33333333	
Sta. 9 Upstream	1,2,3,4,6,7,8-HpCDD	0.000443333	0.0003667	0.000458333	0.00037
	1,2,3,4,6,7,8-HpCDF	0.000136667	9.667E-05	0.000153333	0.00010333
	1,2,3,4,7,8,9-HpCDF	0	0	5.16667E-05	0.00002
	1,2,3,4,7,8-HxCDD	0.000035	0	4.33333E-05	1.6667E-05
	1,2,3,4,7,8-HxCDF	5.16667E-05	6.333E-05	5.83333E-05	6.6667E-05
	1,2,3,6,7,8-HxCDD	0.000206667	0.0001933	0.000215	0.00019667
	1,2,3,6,7,8-HxCDF	7.33333E-05	0.0001067	0.00008	0.00010667
	1,2,3,7,8,9-HxCDD	0.00002	1.333E-05	4.33333E-05	2.6667E-05
	1,2,3,7,8,9-HxCDF	0	0	2.83333E-05	1.3333E-05
	1,2,3,7,8-PeCDD	3.16667E-05	0	3.83333E-05	0.00001
	1,2,3,7,8-PeCDF	0.000363333	0.0003333	0.000363333	0.00033333
	1,2,4-Trichlorobenzene	0	0	9.316666667	8.9
	1,2-Diphenylhydrazine	0	0	9.316666667	8.9
	2,3,4,6,7,8-HxCDF	0.000035	0.00003	0.00004	3.3333E-05
	2,3,4,6-Tetrachlorophenol	0	0	373.1666667	357.333333
	2,3,4,7,8-PeCDF	0.00034	0.0003567	0.00034	0.00035667
	2,3,7,8-TCDD	0.000956667	0.00078	0.000956667	0.00078
	2,3,7,8-TCDF	0.03795	0.0200567	0.03795	0.02005667
	2,4,5-Trichlorophenol	0	0	373.1666667	357.333333
	2,4,6-Trichlorophenol	0	0	373.1666667	357.333333

Appendix E-14. White sturgeon station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet w/o skin	WholeBody	Fillet w/o skin	WholeBody
	2,4-Dichlorophenol	0	0	373.1666667	357.3333333
	2,4-Dimethylphenol	0	0	932.1666667	893
	2,4-Dinitrotoluene	0	0	18.65	17.8666667
	2,6-Dinitrotoluene	0	0	37.31666667	35.73333333
	2-Chloronaphthalene	0	0	18.65	17.8666667
	2-Chlorophenol	0	0	373.1666667	357.3333333
	3,4,5-Trichloroguaiacol	0	0	932.1666667	893
	3,4,6-Trichloroguaiacol	0	0	373.1666667	357.3333333
	3,4-Dichloroguaiacol	0	0	932.1666667	893
	4,5,6-Trichloroguaiacol	0	0	932.1666667	893
	4,5-Dichloroguaiacol	0	0	932.1666667	893
	4,6-Dichloroguaiacol	0	0	932.1666667	893
	4-Bromophenyl-Phenylether	0	0	9.316666667	8.9
	4-Chloro-3-methylphenol	0	0	373.1666667	357.3333333
	4-Chloroguaiacol	0	0	932.1666667	893
	4-Chlorophenyl-Phenylether	0	0	9.316666667	8.9
	9H-Fluorene	0	0	9.316666667	8.9
	Acenaphthene	0	0	18.65	17.8666667
	Acenaphthylene	0	0	9.316666667	8.9
	Aldrin	1.183333333	1.3566667	1.183333333	1.35666667
	Alpha-BHC	0	0	1.95	1.9
	Alpha-Chlordene	0	0	1.95	1.9
	Aluminum	355	56613.333	1188.333333	56613.3333
	Anthracene	0	0	9.316666667	8.9
	Antimony	0	0	50	50
	Arsenic	333.3333333	303.33333	333.3333333	303.333333
	Barium	188.3333333	2226.6667	288.3333333	2226.66667
	Benzene, 1,2-dichloro-	0	0	9.316666667	8.9
	Benzene, 1,3-dichloro-	0	0	9.316666667	8.9
	Benzene, 1,4-dichloro-	0	0	9.316666667	8.9
	Benzo(a)anthracene	0	0	9.316666667	8.9
	Benzo(a)pyrene	0	0	9.316666667	8.9
	Benzo(g,h,i)perylene	0	0	18.65	17.8666667
	Benzo[b]Fluoranthene	0	0	9.316666667	8.9
	Benzo[k]fluoranthene	0	0	9.316666667	8.9
	Beryllium	0.666666667	4.2	4	5.533333333
	Beta-BHC	0	0	1.95	1.9
	bis(2-Chloroisopropyl)ether	0	0	18.65	17.8666667
	Cadmium	0	43.666667	4	43.6666667
	Chromium	75	488.66667	125	488.666667
	Chrysene	0	0	9.316666667	8.9
	cis-Chlordane (alpha-Chlordane)	5.183333333	5.1333333	5.183333333	5.13333333
	cis-Nonachlor	11.9	10.433333	11.9	10.4333333
	Cobalt	69.63333333	273.66667	69.63333333	273.666667
	Copper	265	1155.3333	265	1155.33333
	DDMU	10.36666667	6.9333333	10.36666667	6.93333333

Appendix E-14. White sturgeon station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet w/o skin	WholeBody	Fillet w/o skin	WholeBody
	Delta-BHC	0	0	1.95	1.9
	Dibenz[a,h]anthracene	0	0	18.65	17.8666667
	Dibenzofuran	0	0	9.31666667	8.9
	Endosulfan Sulfate	0	0	1.95	1.9
	Fluoranthene	0	0	18.65	17.8666667
	Gamma-Chlordane	6.73333333	8.8	6.73333333	8.8
	Gamma-Chlordene	0	0	1.95	1.9
	Heptachlor	0	0	1.95	1.9
	Heptachlor Epoxide	0	0	1.95	1.9
	Hexachlorobenzene	11.61666667	12.033333	11.61666667	12.0333333
	Hexachlorobutadiene	0	0	9.31666667	8.9
	Hexachloroethane	0	0	9.31666667	8.9
	Indeno(1,2,3-cd)pyrene	0	0	18.65	17.8666667
	Lead	6.16666667	126.66667	11.16666667	126.666667
	Lindane	0	0	1.95	1.9
	Manganese	257.8333333	3876.6667	257.8333333	3876.66667
	Mercury	108.1666667	111	108.1666667	144.333333
	Mirex	0	0	1.95	1.9
	Naphthalene	0	0	9.31666667	8.9
	Naphthalene, 1-methyl-	0	0	9.31666667	8.9
	Naphthalene, 2-methyl-	0	0	9.31666667	8.9
	Nickel	7	857	32	857
	Nitrobenzene	0	0	9.31666667	8.9
	n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	0.001341667	0.0013533	0.001341667	0.00135333
	OCDF	0.000166667	0.00011	0.00018	0.00011667
	Oxychlordane	0.96	1.65	1.62666667	1.65
	PCB 105	2.758333333	2.7933333	2.758333333	2.79333333
	PCB 114	0.247	0.2153333	0.247	0.21533333
	PCB 118	3.198333333	3.7466667	3.198333333	3.74666667
	PCB 123	0.053633333	0.0539333	0.053633333	0.05393333
	PCB 126	0	0	0.001543333	0.00165667
	PCB 156	1.295666667	1.2933333	1.295666667	1.29333333
	PCB 157	0.234333333	0.229	0.234333333	0.229
	PCB 167	0.043333333	0.0382667	0.043333333	0.03826667
	PCB 169	0	0	0.001656667	0.00133
	PCB 170	2.921666667	2.3166667	2.921666667	2.31666667
	PCB 180	8.241666667	7.5266667	8.241666667	7.52666667
	PCB 189	0.102366667	0.0884333	0.102366667	0.08843333
	Pentachloroanisole	0	0	1.95	1.9
	Pentachlorophenol	0	0	373.1666667	357.333333
	Phenanthrene	0	0	9.31666667	8.9
	Phenol	0	0	373.1666667	357.333333
	Pyrene	0	0	18.65	17.8666667
	Retene	0	0	18.65	17.8666667
	Selenium	1780	785.66667	1780	785.666667

Appendix E-14. White sturgeon station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet w/o skin	WholeBody	Fillet w/o skin	WholeBody
	Silver	0	0	100	100
	Tetrachloroguaiacol	0	0	373.1666667	357.3333333
	Thallium	0	0	50	50
	Toxaphene	0	0	58.33333333	57.33333333
	trans-Nonachlor	9.533333333	8.6	9.533333333	8.6
	Vanadium	4.666666667	282.33333	13	282.3333333
	Zinc	3205	9186.6667	3205	9186.66667
	DDD-o,p'	16.66666667	13.433333	16.66666667	13.43333333
	DDE-o,p'	4	5.4666667	4.633333333	5.46666667
	DDT-o,p'	0	0	1.95	1.9
	DDD-p,p'	148.3333333	120	148.3333333	120
	DDE-p,p'	566.6666667	500	566.6666667	500
	DDT-p,p'	6.95	11.233333	6.95	11.23333333
	PCB 077	0.018343333	0.0152	0.018343333	0.0152
	Aroclor 1016	0	0	19.5	19
	Aroclor 1221	0	0	19.5	19
	Aroclor 1232	0	0	19.5	19
	Aroclor 1242	0	0	19.5	19
	Aroclor 1248	0	0	19.5	19
	Aroclor 1254	77.5	68.333333	77.5	68.33333333
	Aroclor 1260	81.33333333	58.666667	81.33333333	58.6666667
Sta. 9 Downstr.	1,2,3,4,6,7,8-HpCDD	0.00016	0.000565	0.00016	0.000565
	1,2,3,4,6,7,8-HpCDF	0	0.000105	0.00009	0.00016
	1,2,3,4,7,8,9-HpCDF	0	0	0.00009	0.00014
	1,2,3,4,7,8-HxCDD	0	0	0.00003	0.000045
	1,2,3,4,7,8-HxCDF	0.00002	0.000075	0.000035	0.000075
	1,2,3,6,7,8-HxCDD	0.000115	0.000205	0.000115	0.000205
	1,2,3,6,7,8-HxCDF	0.000025	0.000015	0.00004	0.00004
	1,2,3,7,8,9-HxCDD	0.00003	0.000025	0.00004	0.000045
	1,2,3,7,8,9-HxCDF	0	0.000025	0.00003	0.00004
	1,2,3,7,8-PeCDD	0.00005	0.00006	0.00005	0.00006
	1,2,3,7,8-PeCDF	0.000155	0.000295	0.000155	0.000295
	1,2,4-Trichlorobenzene	0	0	9.2	9.55
	1,2-Diphenylhydrazine	0	0	9.2	9.55
	2,3,4,6,7,8-HxCDF	0.00004	0.000025	0.00004	0.00004
	2,3,4,6-Tetrachlorophenol	0	0	368	382
	2,3,4,7,8-PeCDF	0.00023	0.00033	0.00023	0.00033
	2,3,7,8-TCDD	0.000235	0.000655	0.000235	0.000655
	2,3,7,8-TCDF	0.0223	0.028165	0.0223	0.028165
	2,4,5-Trichlorophenol	0	0	368	382
	2,4,6-Trichlorophenol	0	0	368	382
	2,4-Dichlorophenol	0	0	368	382
	2,4-Dimethylphenol	0	0	920	954.5
	2,4-Dinitrotoluene	0	0	18.4	19.1
	2,6-Dinitrotoluene	0	0	36.8	38.2
	2-Chloronaphthalene	0	0	18.4	19.1

Appendix E-14. White sturgeon station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet w/o skin	WholeBody	Fillet w/o skin	WholeBody
	2-Chlorophenol	0	0	368	382
	3,4,5-Trichloroguaiacol	0	0	920	954.5
	3,4,6-Trichloroguaiacol	0	0	368	382
	3,4-Dichloroguaiacol	0	0	920	954.5
	4,5,6-Trichloroguaiacol	0	0	920	954.5
	4,5-Dichloroguaiacol	0	0	920	954.5
	4,6-Dichloroguaiacol	0	0	920	954.5
	4-Bromophenyl-Phenylether	0	0	9.2	9.55
	4-Chloro-3-methylphenol	0	0	368	382
	4-Chloroguaiacol	0	0	920	954.5
	4-Chlorophenyl-Phenylether	0	0	9.2	9.55
	9H-Fluorene	0	0	9.2	9.55
	Acenaphthene	0	0	18.4	19.1
	Acenaphthylene	0	0	9.2	9.55
	Aldrin	0.935	0.55	0.935	1.45
	Alpha-BHC	0	0	1.9	1.85
	Alpha-Chlordene	0	0	1.9	1.85
	Aluminum	0	815	1000	1315
	Anthracene	0	0	9.2	9.55
	Antimony	0	0	50	50
	Arsenic	260	280	260	280
	Barium	252.5	1543	352.5	1543
	Benzene, 1,2-dichloro-	0	0	9.2	9.55
	Benzene, 1,3-dichloro-	0	0	9.2	9.55
	Benzene, 1,4-dichloro-	0	0	9.2	9.55
	Benzo(a)anthracene	0	0	9.2	9.55
	Benzo(a)pyrene	0	0	9.2	9.55
	Benzo(g,h,i)perylene	0	0	18.4	19.1
	Benzo[b]Fluoranthene	0	0	9.2	9.55
	Benzo[k]fluoranthene	0	0	9.2	9.55
	Beryllium	0	0	4	4
	Beta-BHC	0	0	1.9	1.85
	bis(2-Chloroisopropyl)ether	0	0	18.4	19.1
	Cadmium	2.45	33	4.45	33
	Chromium	140	250	140	250
	Chrysene	0	0	9.2	9.55
	cis-Chlordane (alpha-Chlordane)	3.25	3.25	3.25	3.25
	cis-Nonachlor	27.5	12	27.5	12
	Cobalt	87	207	87	207
	Copper	230	695	230	695
	DDMU	45.5	14.5	45.5	14.5
	Delta-BHC	0	0	1.9	1.85
	Dibenz[a,h]anthracene	0	0	18.4	19.1
	Dibenzofuran	0	0	9.2	9.55
	Endosulfan Sulfate	0	0	1.9	1.85
	Fluoranthene	0	0	18.4	19.1

Appendix E-14. White sturgeon station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet w/o skin	WholeBody	Fillet w/o skin	WholeBody
	Gamma-Chlordane	7	5.8	7	5.8
	Gamma-Chlordene	0	0	1.9	1.85
	Heptachlor	0	0	1.9	1.85
	Heptachlor Epoxide	0	0	1.9	1.85
	Hexachlorobenzene	3.15	9.5	3.15	10.4
	Hexachlorobutadiene	0	0	9.2	9.55
	Hexachloroethane	0	0	9.2	9.55
	Indeno(1,2,3-cd)pyrene	0	0	18.4	19.1
	Lead	0	32.5	10	32.5
	Lindane	0	0	1.9	1.85
	Manganese	145	588.5	145	588.5
	Mercury	360	67	360	117
	Mirex	0	0	1.9	1.85
	Naphthalene	0	0	9.2	9.55
	Naphthalene, 1-methyl-	0	0	9.2	9.55
	Naphthalene, 2-methyl-	0	0	9.2	9.55
	Nickel	20	120	35	120
	Nitrobenzene	0	0	9.2	9.55
	n-Nitrosodiphenylamine	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	OCDD	0.00059	0.002525	0.00059	0.002525
	OCDF	0.00022	0.00064	0.00022	0.00064
	Oxychlordane	2.5	0.8	2.5	1.7
	PCB 105	9.58	3.425	9.58	3.425
	PCB 114	0.751	0.277	0.751	0.277
	PCB 118	13.6	3.595	13.6	3.595
	PCB 123	0.1625	0.05465	0.1625	0.05465
	PCB 126	0	0	0.00208	0.001375
	PCB 156	3.49	1.31	3.49	1.31
	PCB 157	0.7425	0.2395	0.7425	0.2395
	PCB 167	0.1705	0.02715	0.1705	0.02715
	PCB 169	0	0	0.00401	0.001585
	PCB 170	6.77	2.185	6.77	2.185
	PCB 180	22.75	9.065	22.75	9.065
	PCB 189	0.306	0.1041	0.306	0.1041
	Pentachloroanisol	0	0	1.9	1.85
	Pentachlorophenol	0	0	368	382
	Phenanthrene	0	0	9.2	9.55
	Phenol	0	0	368	382
	Pyrene	0	0	18.4	19.1
	Retene	0	0	18.4	19.1
	Selenium	631	535	631	785
	Silver	0	0	100	100
	Tetrachloroguaiacol	0	0	368	382
	Thallium	0	0	50	50
	Toxaphene	0	0	56	55.5
	trans-Nonachlor	14	6.95	14	6.95

Appendix E-14. White sturgeon station averages at full detection limits and with the detection limits set to zero.

Station	Chemical	Detection Limits			
		DL=0	DL=0	DL=DL	DL=DL
		Fillet w/o skin	WholeBody	Fillet w/o skin	WholeBody
	Vanadium	0	23	10	28
	Zinc	4435	5440	4435	5440
	DDD-o,p'	23.5	20	23.5	20
	DDE-o,p'	20	8.1	20	8.1
	DDT-o,p'	0	0	1.9	1.85
	DDD-p,p'	345	195	345	195
	DDE-p,p'	1350	590	1350	590
	DDT-p,p'	16.5	5.45	16.5	5.45
	PCB 077	0.0609	0.02245	0.0609	0.02245
	Aroclor 1016	0	0	19	18.5
	Aroclor 1221	0	0	19	18.5
	Aroclor 1232	0	0	19	18.5
	Aroclor 1242	0	0	19	18.5
	Aroclor 1248	0	0	19	18.5
	Aroclor 1254	190	86.5	190	86.5
	Aroclor 1260	200	75	200	75

**COLUMBIA RIVER BASIN FISH
CONTAMINANT SURVEY**

**VOLUME I
Appendix F**

Summary of Chemicals Not Detected

January 2002

**Prepared by
U.S. Environmental Protection Agency
Region 10
Seattle, Washington**

Table F-1. Chemicals Not Detected in Bridgelip Sucker

Chemical Group	Chemical	Sample Type	Site 48
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	✓
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	✓
Guaiacols/Phenols	2,4-Dichlorophenol	WB	✓
Guaiacols/Phenols	2,4-Dimethylphenol	WB	✓
Guaiacols/Phenols	2-Chlorophenol	WB	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	✓
Guaiacols/Phenols	4-Chloroguaiacol	WB	✓
Guaiacols/Phenols	Pentachlorophenol	WB	✓
Guaiacols/Phenols	Phenol	WB	✓
Guaiacols/Phenols	Tetrachloroguaiacol	WB	✓
Metals	Antimony	WB	✓
Metals	Silver	WB	✓
Metals	Thallium	WB	✓
Aroclors	Aroclor 1016	WB	✓
Aroclors	Aroclor 1221	WB	✓
Aroclors	Aroclor 1232	WB	✓
Aroclors	Aroclor 1242	WB	✓
Aroclors	Aroclor 1248	WB	✓
PCB Congeners	PCB 157	WB	✓
Pesticides	Aldrin	WB	✓
Pesticides	Alpha-BHC	WB	✓
Pesticides	Alpha-Chlordene	WB	✓
Pesticides	Beta-BHC	WB	✓
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	✓
Pesticides	cis-Nonachlor	WB	✓
Pesticides	DDT-o,p'	WB	✓
Pesticides	Delta-BHC	WB	✓
Pesticides	Gamma-Chlordane	WB	✓
Pesticides	Gamma-Chlordene	WB	✓
Pesticides	Heptachlor	WB	✓
Pesticides	Heptachlor Epoxide	WB	✓
Pesticides	Hexachlorobenzene	WB	✓
Pesticides	Lindane	WB	✓
Pesticides	Mirex	WB	✓
Pesticides	Oxychlordane	WB	✓
Pesticides	Pentachloroanisol	WB	✓
Pesticides	Toxaphene	WB	✓
Pesticides	trans-Nonachlor	WB	✓
Semivolatiles	1,2,4-Trichlorobenzene	WB	✓
Semivolatiles	2,4-Dinitrotoluene	WB	✓
Semivolatiles	2,6-Dinitrotoluene	WB	✓
Semivolatiles	2-Chloronaphthalene	WB	✓
Semivolatiles	4-Bromophenyl-Phenylether	WB	✓
Semivolatiles	4-Chlorophenyl-Phenylether	WB	✓
Semivolatiles	9H-Fluorene	WB	✓
Semivolatiles	Acenaphthene	WB	✓
Semivolatiles	Acenaphthylene	WB	✓
Semivolatiles	Anthracene	WB	✓
Semivolatiles	Benzene, 1,2-dichloro-	WB	✓
Semivolatiles	Benzene, 1,3-dichloro-	WB	✓
Semivolatiles	Benzene, 1,4-dichloro-	WB	✓
Semivolatiles	Benzo(a)anthracene	WB	✓
Semivolatiles	Benzo(a)pyrene	WB	✓

Table F-1. Chemicals Not Detected in Bridgelip Sucker

Chemical Group	Chemical	Sample Type	Site
			48
Semivolatiles	Benzo(g,h,i)perylene	WB	✓
Semivolatiles	Benzo[b]Fluoranthene	WB	✓
Semivolatiles	Benzo[k]fluoranthene	WB	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	✓
Semivolatiles	Chrysene	WB	✓
Semivolatiles	Dibenz[a,h]anthracene	WB	✓
Semivolatiles	Dibenzofuran	WB	✓
Semivolatiles	Fluoranthene	WB	✓
Semivolatiles	Hexachlorobutadiene	WB	✓
Semivolatiles	Hexachloroethane	WB	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	✓
Semivolatiles	Naphthalene	WB	✓
Semivolatiles	Nitrobenzene	WB	✓
Semivolatiles	Phenanthrene	WB	✓
Semivolatiles	Pyrene	WB	✓
Semivolatiles	Retene	WB	✓

NOTE:

✓ - indicates that chemical was not detected for that species and sample type

na - chemical was not analyzed for that species and sample type

blank - indicates that chemical was detected for that species and sample type

WB - whole body

Site 48 - located in the Yakima River

Table F-2. Chemicals Not Detected in Largescale Sucker

Chemical Group	Chemical	Sample Type	Site						
			8	9U	13	30	48	49	98
Dioxin/furans	2,3,7,8-TCDD	FS	na		✓				
Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	na	✓	✓		✓		
Dioxin/furans	1,2,3,7,8-PeCDF	FS	na	✓	✓		✓		
Dioxin/furans	2,3,4,7,8-PeCDF	FS	na						✓
Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	na	✓	✓		✓		
Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	na				✓		
Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	na	✓	✓		✓		
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	na		✓		✓		
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	na	✓	✓		✓		
Dioxin/furans	OCDF	FS	na		✓		✓		
Guaiacols/Phenols	4-Chloroguaiacol	FS	na	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	na	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	na	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	na	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	na	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	na	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	na	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	Tetrachloroguaiacol	FS	na	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2-Chlorophenol	FS	na	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	na	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dichlorophenol	FS	na	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dimethylphenol	FS	na	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	na	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	na	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	na	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	Pentachlorophenol	FS	na	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	Phenol	FS	na	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1016	FS	na	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1221	FS	na	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1232	FS	na	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1242	FS	na	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1248	FS	na	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1254	FS	na		✓				
Aroclors	Aroclor 1260	FS	na		✓				✓
PCB Congeners	PCB 126	FS	na		✓	✓	✓		
PCB Congeners	PCB 157	FS	na			✓			
PCB Congeners	PCB 169	FS	na	✓		✓	✓	✓	✓
Pesticides	Aldrin	FS	na	✓	✓	✓	✓	✓	✓
Pesticides	Alpha-BHC	FS	na	✓	✓	✓	✓	✓	✓
Pesticides	Alpha-Chlordene	FS	na	✓	✓	✓	✓	✓	✓
Pesticides	Beta-BHC	FS	na	✓	✓	✓	✓	✓	✓
Pesticides	cis-Chlordane (alpha-Chlordane)	FS	na	✓	✓	✓		✓	✓
Pesticides	cis-Nonachlor	FS	na	✓	✓	✓	✓	✓	✓
Pesticides	DDD-o,p'	FS	na			✓			✓
Pesticides	DDE-o,p'	FS	na			✓			✓
Pesticides	DDT-o,p'	FS	na	✓		✓		✓	✓
Pesticides	DDD-p,p'	FS	na						✓
Pesticides	DDMU	FS	na			✓		✓	✓
Pesticides	Delta-BHC	FS	na	✓	✓	✓	✓	✓	✓
Pesticides	Endosulfan Sulfate	FS	na	✓	✓	✓		✓	✓
Pesticides	Gamma-Chlordane	FS	na	✓	✓	✓	✓	✓	✓
Pesticides	Gamma-Chlordene	FS	na	✓	✓	✓	✓	✓	✓
Pesticides	Heptachlor	FS	na	✓	✓	✓	✓	✓	✓
Pesticides	Heptachlor Epoxide	FS	na	✓	✓	✓	✓	✓	✓
Pesticides	Hexachlorobenzene	FS	na	✓	✓	✓	✓	✓	✓
Pesticides	Lindane	FS	na	✓	✓	✓	✓	✓	✓
Pesticides	Mirex	FS	na	✓	✓	✓		✓	✓
Pesticides	Oxychlordane	FS	na	✓	✓	✓	✓	✓	✓
Pesticides	Pentachloroanisol	FS	na	✓	✓	✓			✓

Table F-2. Chemicals Not Detected in Largescale Sucker

Chemical Group	Chemical	Sample Type	Site						
			8	9U	13	30	48	49	98
Pesticides	Toxaphene	FS	na	✓	✓	✓	✓	✓	✓
Pesticides	trans-Nonachlor	FS	na	✓	✓	✓		✓	✓
Semivolatiles	1,2,4-Trichlorobenzene	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	1,2-Diphenylhydrazine	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	2,4-Dinitrotoluene	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	2,6-Dinitrotoluene	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	2-Chloronaphthalene	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	4-Bromophenyl-Phenylether	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	4-Chlorophenyl-Phenylether	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	Acenaphthene	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	Acenaphthylene	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	Anthracene	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,2-dichloro-	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,3-dichloro-	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,4-dichloro-	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo(a)anthracene	FS	na	✓		✓	✓	✓	✓
Semivolatiles	Benzo(a)pyrene	FS	na	✓		✓	✓	✓	✓
Semivolatiles	Benzo(g,h,i)perylene	FS	na	✓		✓	✓	✓	✓
Semivolatiles	Benzo[b]fluoranthene	FS	na	✓		✓	✓	✓	✓
Semivolatiles	Benzo[k]fluoranthene	FS	na	✓		✓	✓	✓	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	Chrysene	FS	na	✓		✓	✓	✓	✓
Semivolatiles	Dibenz[a,h]anthracene	FS	na	✓		✓	✓	✓	✓
Semivolatiles	Dibenzofuran	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	Fluoranthene	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	9H-Fluorene	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	Hexachlorobutadiene	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	Hexachloroethane	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	na	✓		✓	✓	✓	✓
Semivolatiles	Naphthalene	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene, 1-methyl-	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene, 2-methyl-	FS	na	✓	✓		✓	✓	✓
Semivolatiles	Nitrobenzene	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	Phenanthrene	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	Pyrene	FS	na	✓	✓	✓	✓	✓	✓
Semivolatiles	Retene	FS	na	✓	✓	✓	✓	✓	✓
Metals	Antimony	FS	na	✓	✓	✓	✓	✓	✓
Metals	Beryllium	FS	na	✓	✓		✓		✓
Metals	Cadmium	FS	na		✓		✓	✓	✓
Metals	Chromium	FS	na					✓	✓
Metals	Silver	FS	na	✓	✓	✓	✓	✓	✓
Metals	Thallium	FS	na	✓	✓	✓		✓	✓
Metals	Vanadium	FS	na	✓			✓		
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	✓		✓				
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB		✓					
Dioxin/furans	1,2,3,7,8-PeCDF	WB		✓	✓				
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	✓		✓				
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	✓		✓				
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	✓	✓	✓				✓
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB		✓	✓				
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB			✓				
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	✓	✓	✓	✓	✓	✓	
Guaiacols/Phenols	4-Chloroguaiacol	WB	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	✓	✓	✓	✓	✓	✓	✓

Table F-2. Chemicals Not Detected in Largescale Sucker

Chemical Group	Chemical	Sample Type	Site						
			8	9U	13	30	48	49	98
Guaiacols/Phenols	Tetrachloroguaiacol	WB	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2-Chlorophenol	WB	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dichlorophenol	WB	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dimethylphenol	WB	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	✓	✓	✓	na	✓	✓	na
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	✓	✓	✓	na	✓	✓	na
Guaiacols/Phenols	Pentachlorophenol	WB	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	Phenol	WB	✓	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1016	WB	✓	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1221	WB	✓	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1232	WB	✓	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1242	WB	✓	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1248	WB	✓	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1254	WB				✓			
Aroclors	Aroclor 1260	WB			✓				✓
PCB Congeners	PCB 126	WB	✓		✓	✓	✓		
PCB Congeners	PCB 157	WB				✓			
PCB Congeners	PCB 169	WB	✓	✓	✓	✓	✓	✓	✓
Pesticides	Aldrin	WB	✓	✓	✓	✓	✓	✓	✓
Pesticides	Alpha-BHC	WB	✓	✓	✓	✓	✓	✓	✓
Pesticides	Alpha-Chlordene	WB	✓	✓	✓	✓	✓	✓	✓
Pesticides	Beta-BHC	WB	✓	✓	✓	✓	✓	✓	✓
Pesticides	cis-Chlordane (alpha-Chlordane)	WB		✓	✓	✓	✓	✓	✓
Pesticides	cis-Nonachlor	WB		✓	✓	✓		✓	✓
Pesticides	DDD-o,p'	WB				✓			✓
Pesticides	DDE-o,p'	WB							✓
Pesticides	DDT-o,p'	WB	✓	✓		✓		✓	✓
Pesticides	DDMU	WB				✓		✓	✓
Pesticides	Delta-BHC	WB	✓	✓	✓	✓	✓	✓	✓
Pesticides	Endosulfan Sulfate	WB	✓	✓	✓	✓		✓	✓
Pesticides	Gamma-Chlordane	WB		✓	✓	✓	✓	✓	✓
Pesticides	Gamma-Chlordene	WB	✓	✓	✓	✓	✓	✓	✓
Pesticides	Heptachlor	WB	✓	✓	✓	✓	✓	✓	✓
Pesticides	Heptachlor Epoxide	WB	✓	✓	✓	✓	✓	✓	✓
Pesticides	Hexachlorobenzene	WB			✓	✓	✓	✓	✓
Pesticides	Lindane	WB	✓	✓	✓	✓	✓	✓	✓
Pesticides	Mirex	WB		✓	✓	✓		✓	✓
Pesticides	Oxychlordane	WB	✓	✓	✓	✓		✓	✓
Pesticides	Pentachloroanisol	WB	✓	✓	✓	✓			✓
Pesticides	Toxaphene	WB	✓	✓	✓		✓		✓
Pesticides	trans-Nonachlor	WB				✓		✓	✓
Semivolatiles	1,2,4-Trichlorobenzene	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	1,2-Diphenylhydrazine	WB	✓	✓	✓	✓	✓		✓
Semivolatiles	2,4-Dinitrotoluene	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	2,6-Dinitrotoluene	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	2-Chloronaphthalene	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	4-Bromophenyl-Phenylether	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	4-Chlorophenyl-Phenylether	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Acenaphthene	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Acenaphthylene	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Anthracene	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,2-dichloro-	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,3-dichloro-	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,4-dichloro-	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo(a)anthracene	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo(a)pyrene	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo(g,h,i)perylene	WB	✓	✓	✓	✓	✓	✓	✓

Table F-2. Chemicals Not Detected in Largescale Sucker

Chemical Group	Chemical	Sample Type	Site						
			8	9U	13	30	48	49	98
Semivolatiles	Benzo[b]Fluoranthene	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo[k]fluoranthene	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Chrysene	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Dibenz[a,h]anthracene	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Dibenzofuran	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Fluoranthene	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	9H-Fluorene	WB	✓	✓		✓	✓	✓	✓
Semivolatiles	Hexachlorobutadiene	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Hexachloroethane	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene	WB	✓	✓	✓	✓	✓		✓
Semivolatiles	Naphthalene, 1-methyl-	WB	✓	✓	✓			✓	✓
Semivolatiles	Naphthalene, 2-methyl-	WB	✓	✓	✓			✓	
Semivolatiles	Nitrobenzene	WB	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Phenanthrene	WB	✓	✓	✓		✓	✓	✓
Semivolatiles	Pyrene	WB	✓	✓	✓	✓	✓	✓	
Semivolatiles	Retene	WB	✓	✓	✓	✓	✓	✓	
Metals	Aluminum	WB							✓
Metals	Antimony	WB	✓	✓	✓	✓	✓	✓	✓
Metals	Beryllium	WB				✓			✓
Metals	Selenium	WB	✓						
Metals	Silver	WB	✓	✓	✓	✓	✓	✓	✓
Metals	Thallium	WB	✓	✓	✓	✓	✓	✓	✓

NOTE:

✓ - indicates that chemical was not detected for that species and sample type

na - chemical was not analyzed for that species and sample type

blank - indicates that chemical was detected for that species and sample type

FS - fillet with skin

WB - whole body

Site 8 - located in the Columbia River between the John Day dam and the McNary dam

Site 9U - located in the upper Columbia River above the Snake River

Site 13 - located in the Snake River

Site 30 - located in the Umatilla River

Site 48 and 49 - located in the Yakima River

Site 98 - located in the Deschutes River

Table F-3. Chemicals Not Detected in Mountain Whitefish

Chemical Group	Chemical	Sample Type	Site			
			9U	48	98	101
Dioxin/furans	1,2,3,7,8,9-HxCDD	FS		✓		
Dioxin/furans	1,2,3,7,8,9-HxCDF	FS		✓		
Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	✓			
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	✓	✓		
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	✓	✓		✓
Guaiacols/Phenols	4-Chloroguaiacol	FS	✓	✓	✓	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	✓	✓	✓	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	✓	✓	✓	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	✓	✓	✓	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	✓	✓	✓	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	✓	✓	✓	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	✓	✓	✓	✓
Guaiacols/Phenols	Tetrachloroguaiacol	FS	✓	✓	✓	✓
Guaiacols/Phenols	2-Chlorophenol	FS	✓	✓	✓	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dichlorophenol	FS	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dimethylphenol	FS	✓	✓	✓	✓
Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	✓	✓	✓	na
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	✓	✓	✓	✓
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	✓	✓	✓	na
Guaiacols/Phenols	Pentachlorophenol	FS	✓	✓	✓	✓
Guaiacols/Phenols	Phenol	FS	✓	✓	✓	✓
Aroclors	Aroclor 1016	FS	✓	✓	✓	✓
Aroclors	Aroclor 1221	FS	✓	✓	✓	✓
Aroclors	Aroclor 1232	FS	✓	✓	✓	✓
Aroclors	Aroclor 1242	FS		✓	✓	✓
Aroclors	Aroclor 1248	FS	✓	✓	✓	✓
Aroclors	Aroclor 1254	FS				✓
Aroclors	Aroclor 1260	FS			✓	
PCB Congeners	PCB 126	FS				✓
PCB Congeners	PCB 169	FS	✓	✓	✓	
Pesticides	Aldrin	FS		✓	✓	✓
Pesticides	Alpha-BHC	FS	✓	✓	✓	✓
Pesticides	Alpha-Chlordene	FS	✓	✓	✓	✓
Pesticides	Beta-BHC	FS	✓	✓	✓	✓
Pesticides	cis-Chlordane (alpha-Chlordane)	FS	✓	✓	✓	✓
Pesticides	cis-Nonachlor	FS			✓	✓
Pesticides	DDD-o,p'	FS			✓	✓
Pesticides	DDE-o,p'	FS			✓	
Pesticides	DDT-o,p'	FS	✓	✓	✓	✓
Pesticides	DDD-p,p'	FS			✓	✓
Pesticides	DDT-p,p'	FS			✓	
Pesticides	DDMU	FS			✓	✓
Pesticides	Delta-BHC	FS	✓	✓	✓	✓
Pesticides	Endosulfan Sulfate	FS	✓	✓	✓	✓
Pesticides	Gamma-Chlordane	FS	✓	✓	✓	✓
Pesticides	gamma-Chlordene	FS	✓	✓	✓	✓
Pesticides	Heptachlor	FS	✓	✓	✓	✓
Pesticides	Heptachlor Epoxide	FS	✓	✓	✓	✓
Pesticides	Hexachlorobenzene	FS	✓		✓	✓
Pesticides	Lindane	FS	✓	✓	✓	✓
Pesticides	Mirex	FS		✓	✓	✓
Pesticides	Oxychlordane	FS	✓	✓	✓	✓
Pesticides	Pentachloroanisol	FS	✓		✓	✓
Pesticides	Toxaphene	FS	✓	✓	✓	✓
Pesticides	trans-Nonachlor	FS			✓	✓
Semivolatiles	1,2,4-Trichlorobenzene	FS	✓	✓	✓	✓
Semivolatiles	1,2-Diphenylhydrazine	FS	✓	✓	✓	✓
Semivolatiles	2,4-Dinitrotoluene	FS	✓	✓	✓	✓

Table F-3. Chemicals Not Detected in Mountain Whitefish

Chemical Group	Chemical	Sample Type	Site			
			9U	48	98	101
Semivolatiles	2,6-Dinitrotoluene	FS	✓	✓	✓	✓
Semivolatiles	2-Chloronaphthalene	FS	✓	✓	✓	✓
Semivolatiles	4-Bromophenyl-Phenylether	FS	✓	✓	✓	✓
Semivolatiles	4-Chlorophenyl-Phenylether	FS	✓	✓	✓	✓
Semivolatiles	Acenaphthene	FS	✓	✓	✓	✓
Semivolatiles	Acenaphthylene	FS	✓	✓	✓	✓
Semivolatiles	Anthracene	FS	✓	✓	✓	✓
Semivolatiles	Benzene, 1,2-dichloro-	FS	✓	✓	✓	✓
Semivolatiles	Benzene, 1,3-dichloro-	FS	✓	✓	✓	✓
Semivolatiles	Benzene, 1,4-dichloro-	FS	✓	✓	✓	✓
Semivolatiles	Benzo(a)anthracene	FS	✓	✓	✓	✓
Semivolatiles	Benzo(a)pyrene	FS	✓	✓	✓	✓
Semivolatiles	Benzo(g,h,i)perylene	FS	✓	✓	✓	✓
Semivolatiles	Benzo[b]Fluoranthene	FS	✓	✓	✓	✓
Semivolatiles	Benzo[k]fluoranthene	FS	✓	✓	✓	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	✓	✓	✓	✓
Semivolatiles	Chrysene	FS	✓	✓	✓	✓
Semivolatiles	Dibenz[a,h]anthracene	FS	✓	✓	✓	✓
Semivolatiles	Dibenzofuran	FS	✓	✓	✓	✓
Semivolatiles	Fluoranthene	FS	✓	✓	✓	✓
Semivolatiles	9H-Fluorene	FS	✓	✓	✓	✓
Semivolatiles	Hexachlorobutadiene	FS	✓	✓	✓	✓
Semivolatiles	Hexachloroethane	FS	✓	✓	✓	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	✓	✓	✓	✓
Semivolatiles	Naphthalene	FS	✓	✓	✓	✓
Semivolatiles	Naphthalene, 1-methyl-	FS	✓	✓	✓	✓
Semivolatiles	Naphthalene, 2-methyl-	FS	✓	✓	✓	✓
Semivolatiles	Nitrobenzene	FS	✓	✓	✓	✓
Semivolatiles	Phenanthrene	FS	✓	✓	✓	✓
Semivolatiles	Pyrene	FS	✓	✓	✓	✓
Semivolatiles	Retene	FS	✓	✓	✓	✓
Metals	Aluminum	FS			✓	
Metals	Antimony	FS	✓	✓	✓	✓
Metals	Beryllium	FS	✓	✓	✓	✓
Metals	Cadmium	FS			✓	✓
Metals	Chromium	FS		✓	✓	
Metals	Lead	FS				✓
Metals	Mercury	FS	✓			
Metals	Silver	FS	✓	✓	✓	✓
Metals	Thallium	FS	✓	✓	✓	✓
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB		✓		
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	✓	✓		
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB		✓		
Dioxin/furans	OCDF	WB		✓		
Guaiacols/Phenols	4-Chloroguaiacol	WB	✓	✓	✓	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	✓	✓	✓	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	✓	✓	✓	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	✓	✓	✓	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	✓	✓	✓	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	✓	✓	✓	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	✓	✓	✓	✓
Guaiacols/Phenols	Tetrachloroguaiacol	WB	✓	✓	✓	✓
Guaiacols/Phenols	2-Chlorophenol	WB	✓	✓	✓	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dichlorophenol	WB	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dimethylphenol	WB	✓	✓	✓	✓
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	✓	✓	✓	na
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	✓	✓	✓	✓
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	✓	✓	✓	na

Table F-3. Chemicals Not Detected in Mountain Whitefish

Chemical Group	Chemical	Sample Type	Site			
			9U	48	98	101
Guaiacols/Phenols	Pentachlorophenol	WB	✓	✓	✓	✓
Guaiacols/Phenols	Phenol	WB	✓	✓	✓	✓
Aroclors	Aroclor 1016	WB	✓	✓	✓	✓
Aroclors	Aroclor 1221	WB	✓	✓	✓	✓
Aroclors	Aroclor 1232	WB	✓	✓	✓	✓
Aroclors	Aroclor 1242	WB		✓	✓	✓
Aroclors	Aroclor 1248	WB	✓	✓	✓	✓
Aroclors	Aroclor 1254	WB				✓
Aroclors	Aroclor 1260	WB			✓	
PCB Congeners	PCB 126	WB				✓
PCB Congeners	PCB 157	WB				✓
PCB Congeners	PCB 169	WB	✓		✓	
Pesticides	Aldrin	WB		✓	✓	✓
Pesticides	Alpha-BHC	WB		✓	✓	✓
Pesticides	Alpha-Chlordene	WB	✓	✓	✓	✓
Pesticides	Beta-BHC	WB	✓	✓	✓	✓
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	✓	✓	✓	✓
Pesticides	cis-Nonachlor	WB			✓	✓
Pesticides	DDD-o,p'	WB			✓	✓
Pesticides	DDE-o,p'	WB			✓	
Pesticides	DDT-o,p'	WB	✓	✓	✓	✓
Pesticides	DDD-p,p'	WB			✓	✓
Pesticides	DDT-p,p'	WB			✓	
Pesticides	DDMU	WB			✓	✓
Pesticides	Delta-BHC	WB	✓	✓	✓	✓
Pesticides	Endosulfan Sulfate	WB	✓	✓	✓	✓
Pesticides	Gamma-Chlordane	WB	✓	✓	✓	✓
Pesticides	gamma-Chlordene	WB	✓	✓	✓	✓
Pesticides	Heptachlor	WB	✓	✓	✓	✓
Pesticides	Heptachlor Epoxide	WB	✓	✓	✓	✓
Pesticides	Hexachlorobenzene	WB			✓	✓
Pesticides	Lindane	WB	✓	✓	✓	✓
Pesticides	Mirex	WB		✓	✓	✓
Pesticides	Oxychlordane	WB	✓	✓	✓	✓
Pesticides	Pentachloroanisol	WB			✓	✓
Pesticides	Toxaphene	WB	✓	✓	✓	✓
Pesticides	trans-Nonachlor	WB			✓	✓
Semivolatiles	1,2,4-Trichlorobenzene	WB	✓	✓	✓	✓
Semivolatiles	1,2-Diphenylhydrazine	WB	✓	✓	✓	✓
Semivolatiles	2,4-Dinitrotoluene	WB	✓	✓	✓	✓
Semivolatiles	2,6-Dinitrotoluene	WB	✓	✓	✓	
Semivolatiles	2-Chloronaphthalene	WB	✓	✓	✓	✓
Semivolatiles	4-Bromophenyl-Phenylether	WB	✓	✓	✓	✓
Semivolatiles	4-Chlorophenyl-Phenylether	WB	✓	✓	✓	✓
Semivolatiles	Acenaphthene	WB	✓		✓	✓
Semivolatiles	Acenaphthylene	WB	✓	✓	✓	✓
Semivolatiles	Anthracene	WB	✓	✓	✓	✓
Semivolatiles	Benzene, 1,2-dichloro-	WB	✓	✓	✓	✓
Semivolatiles	Benzene, 1,3-dichloro-	WB	✓	✓	✓	✓
Semivolatiles	Benzene, 1,4-dichloro-	WB	✓	✓	✓	✓
Semivolatiles	Benzo(a)anthracene	WB	✓	✓	✓	✓
Semivolatiles	Benzo(a)pyrene	WB	✓	✓	✓	✓
Semivolatiles	Benzo(g,h,i)perylene	WB	✓	✓	✓	✓
Semivolatiles	Benzo[b]Fluoranthene	WB	✓	✓	✓	✓
Semivolatiles	Benzo[k]fluoranthene	WB	✓	✓	✓	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	✓	✓	✓	✓
Semivolatiles	Chrysene	WB	✓	✓	✓	✓
Semivolatiles	Dibenz[a,h]anthracene	WB	✓	✓	✓	✓
Semivolatiles	Dibenzofuran	WB	✓	✓	✓	✓

Table F-3. Chemicals Not Detected in Mountain Whitefish

Chemical Group	Chemical	Sample Type	Site			
			9U	48	98	101
Semivolatiles	Fluoranthene	WB	✓	✓	✓	✓
Semivolatiles	9H-Fluorene	WB	✓	✓	✓	✓
Semivolatiles	Hexachlorobutadiene	WB	✓	✓	✓	✓
Semivolatiles	Hexachloroethane	WB	✓	✓	✓	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	✓	✓	✓	✓
Semivolatiles	Naphthalene	WB	✓	✓	✓	✓
Semivolatiles	Naphthalene, 1-methyl-	WB	✓	✓	✓	✓
Semivolatiles	Naphthalene, 2-methyl-	WB	✓	✓		✓
Semivolatiles	Nitrobenzene	WB	✓	✓	✓	✓
Semivolatiles	Phenanthrene	WB	✓	✓	✓	✓
Semivolatiles	Pyrene	WB	✓	✓	✓	✓
Semivolatiles	Retene	WB	✓	✓		✓
Metals	Antimony	WB	✓	✓	✓	✓
Metals	Beryllium	WB	✓	✓	✓	✓
Metals	Mercury	WB	✓			
Metals	Silver	WB	✓	✓	✓	✓
Metals	Thallium	WB	✓	✓	✓	✓

NOTE:

✓ - indicates that chemical was not detected for that species and sample type

na - chemical was not analyzed for that species and sample type

blank - indicates that chemical was detected for that species and sample type

FS - fillet with skin

WB - whole body

Site 9U - located in the upper Columbia River above the Snake River

Site 48 - located in the Yakima River

Site 98 - located in the Deschutes River

Site 101 - located in the Umatilla River

Table F-4. Chemicals Not Detected in White Sturgeon

Chemical Group	Chemical	Sample Type	Site					
			6	7	8	9L	9U	13
Dioxin/furans	1,2,3,4,7,8-HxCDD	FW					✓	
Dioxin/furans	1,2,3,7,8,9-HxCDF	FW				✓	✓	
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FW					✓	
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FW			✓	✓	✓	✓
Guaiacols/Phenols	4-Chloroguaiacol	FW	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	FW	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	FW	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	FW	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FW	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FW	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FW	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	Tetrachloroguaiacol	FW	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2-Chlorophenol	FW	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	FW	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dichlorophenol	FW	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dimethylphenol	FW	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4,5-Trichlorophenol	FW	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4,6-Trichlorophenol	FW	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FW	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	Pentachlorophenol	FW	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	Phenol	FW	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1016	FW	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1221	FW	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1232	FW	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1242	FW	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1248	FW	✓	✓	✓	✓	✓	✓
PCB Congeners	PCB 126	FW	✓		✓	✓	✓	✓
PCB Congeners	PCB 167	FW	✓					
PCB Congeners	PCB 169	FW	✓	✓	✓	✓	✓	✓
Pesticides	Aldrin	FW	✓	✓	✓			✓
Pesticides	Alpha-BHC	FW	✓	✓	✓	✓	✓	✓
Pesticides	Alpha-Chlordene	FW	✓	✓	✓	✓	✓	
Pesticides	Beta-BHC	FW	✓	✓	✓	✓	✓	✓
Pesticides	cis-Chlordane (alpha-Chlordane)	FW			✓			
Pesticides	DDT-o,p'	FW				✓	✓	
Pesticides	Delta-BHC	FW	✓	✓	✓	✓	✓	✓
Pesticides	Endosulfan Sulfate	FW	✓	✓	✓	✓	✓	✓
Pesticides	Gamma-Chlordene	FW	✓	✓	✓	✓	✓	✓
Pesticides	Heptachlor	FW	✓	✓	✓	✓	✓	✓
Pesticides	Heptachlor Epoxide	FW		✓	✓	✓	✓	✓
Pesticides	Lindane	FW	✓	✓	✓	✓	✓	✓
Pesticides	Mirex	FW	✓	✓	✓	✓	✓	✓
Pesticides	Oxychlordane	FW	✓	✓	✓			✓
Pesticides	Pentachloroanisol	FW	✓	✓	✓	✓	✓	✓
Pesticides	Toxaphene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	1,2,4-Trichlorobenzene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	1,2-Diphenylhydrazine	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	2,4-Dinitrotoluene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	2,6-Dinitrotoluene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	2-Chloronaphthalene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	4-Bromophenyl-Phenylether	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	4-Chlorophenyl-Phenylether	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Acenaphthene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Acenaphthylene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Anthracene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,2-dichloro-	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,3-dichloro-	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,4-dichloro-	FW	✓	✓	✓	✓	✓	✓

Table F-4. Chemicals Not Detected in White Sturgeon

Chemical Group	Chemical	Sample Type	Site					
			6	7	8	9L	9U	13
Semivolatiles	Benzo(a)anthracene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo(a)pyrene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo(g,h,i)perylene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo[b]Fluoranthene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo[k]fluoranthene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Chrysene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Dibenz[a,h]anthracene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Dibenzofuran	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Fluoranthene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	9H-Fluorene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Hexachlorobutadiene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Hexachloroethane	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene, 1-methyl-	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene, 2-methyl-	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Nitrobenzene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Phenanthrene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Pyrene	FW	✓	✓	✓	✓	✓	✓
Semivolatiles	Retene	FW	✓	✓	✓	✓	✓	✓
Metals	Aluminum	FW	✓	✓	✓	✓	✓	✓
Metals	Antimony	FW	✓	✓	✓	✓	✓	✓
Metals	Beryllium	FW	✓	✓	✓	✓	✓	✓
Metals	Cadmium	FW	✓	✓	✓	✓	✓	✓
Metals	Chromium	FW	✓	✓	✓	✓	✓	✓
Metals	Lead	FW	✓	✓	✓	✓	✓	✓
Metals	Silver	FW	✓	✓	✓	✓	✓	✓
Metals	Thallium	FW	✓	✓	✓	✓	✓	✓
Metals	Vanadium	FW	✓	✓	✓	✓	✓	✓
Dioxin/furans	1,2,3,7,8-PeCDD	WB	na	na	✓	✓	✓	na
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	na	na	✓	✓	✓	na
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	na	na	✓	✓	✓	na
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	na	na	✓	✓	✓	na
Guaiacols/Phenols	4-Chloroguaiacol	WB	na	na	✓	✓	✓	na
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	na	na	✓	✓	✓	na
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	na	na	✓	✓	✓	na
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	na	na	✓	✓	✓	na
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	na	na	✓	✓	✓	na
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	na	na	✓	✓	✓	na
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	na	na	✓	✓	✓	na
Guaiacols/Phenols	Tetrachloroguaiacol	WB	na	na	✓	✓	✓	na
Guaiacols/Phenols	2-Chlorophenol	WB	na	na	✓	✓	✓	na
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	na	na	✓	✓	✓	na
Guaiacols/Phenols	2,4-Dichlorophenol	WB	na	na	✓	✓	✓	na
Guaiacols/Phenols	2,4-Dimethylphenol	WB	na	na	✓	✓	✓	na
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	na	na	✓	✓	✓	na
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	na	na	✓	✓	✓	na
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	na	na	✓	✓	✓	na
Guaiacols/Phenols	Pentachlorophenol	WB	na	na	✓	✓	✓	na
Guaiacols/Phenols	Phenol	WB	na	na	✓	✓	✓	na
Aroclors	Aroclor 1016	WB	na	na	✓	✓	✓	na
Aroclors	Aroclor 1221	WB	na	na	✓	✓	✓	na
Aroclors	Aroclor 1232	WB	na	na	✓	✓	✓	na
Aroclors	Aroclor 1242	WB	na	na	✓	✓	✓	na
Aroclors	Aroclor 1248	WB	na	na	✓	✓	✓	na
PCB Congeners	PCB 126	WB	na	na	✓	✓	✓	na
PCB Congeners	PCB 169	WB	na	na	✓	✓	✓	na

Table F-4. Chemicals Not Detected in White Sturgeon

Chemical Group	Chemical	Sample Type	Site					
			6	7	8	9L	9U	13
Pesticides	Aldrin	WB	na	na	✓			na
Pesticides	Alpha-BHC	WB	na	na	✓	✓	✓	na
Pesticides	Alpha-Chlordene	WB	na	na	✓	✓	✓	na
Pesticides	Beta-BHC	WB	na	na	✓	✓	✓	na
Pesticides	DDT-o,p'	WB	na	na		✓	✓	na
Pesticides	Delta-BHC	WB	na	na	✓	✓	✓	na
Pesticides	Endosulfan Sulfate	WB	na	na	✓	✓	✓	na
Pesticides	Gamma-Chlordene	WB	na	na	✓	✓	✓	na
Pesticides	Heptachlor	WB	na	na	✓	✓	✓	na
Pesticides	Heptachlor Epoxide	WB	na	na	✓	✓	✓	na
Pesticides	Lindane	WB	na	na	✓	✓	✓	na
Pesticides	Mirex	WB	na	na	✓	✓	✓	na
Pesticides	Oxychlordane	WB	na	na	✓			na
Pesticides	Pentachloroanisol	WB	na	na	✓	✓	✓	na
Pesticides	Toxaphene	WB	na	na	✓	✓	✓	na
Semivolatiles	1,2,4-Trichlorobenzene	WB	na	na	✓	✓	✓	na
Semivolatiles	1,2-Diphenylhydrazine	WB	na	na	✓	✓	✓	na
Semivolatiles	2,4-Dinitrotoluene	WB	na	na	✓	✓	✓	na
Semivolatiles	2,6-Dinitrotoluene	WB	na	na	✓	✓	✓	na
Semivolatiles	2-Chloronaphthalene	WB	na	na	✓	✓	✓	na
Semivolatiles	4-Bromophenyl-Phenylether	WB	na	na	✓	✓	✓	na
Semivolatiles	4-Chlorophenyl-Phenylether	WB	na	na	✓	✓	✓	na
Semivolatiles	Acenaphthene	WB	na	na	✓	✓	✓	na
Semivolatiles	Acenaphthylene	WB	na	na	✓	✓	✓	na
Semivolatiles	Anthracene	WB	na	na	✓	✓	✓	na
Semivolatiles	Benzene, 1,2-dichloro-	WB	na	na	✓	✓	✓	na
Semivolatiles	Benzene, 1,3-dichloro-	WB	na	na	✓	✓	✓	na
Semivolatiles	Benzene, 1,4-dichloro-	WB	na	na	✓	✓	✓	na
Semivolatiles	Benzo(a)anthracene	WB	na	na	✓	✓	✓	na
Semivolatiles	Benzo(a)pyrene	WB	na	na	✓	✓	✓	na
Semivolatiles	Benzo(g,h,i)perylene	WB	na	na	✓	✓	✓	na
Semivolatiles	Benzo[b]Fluoranthene	WB	na	na	✓	✓	✓	na
Semivolatiles	Benzo[k]fluoranthene	WB	na	na	✓	✓	✓	na
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	na	na	✓	✓	✓	na
Semivolatiles	Chrysene	WB	na	na	✓	✓	✓	na
Semivolatiles	Dibenz[a,h]anthracene	WB	na	na	✓	✓	✓	na
Semivolatiles	Dibenzofuran	WB	na	na	✓	✓	✓	na
Semivolatiles	Fluoranthene	WB	na	na	✓	✓	✓	na
Semivolatiles	9H-Fluorene	WB	na	na	✓	✓	✓	na
Semivolatiles	Hexachlorobutadiene	WB	na	na	✓	✓	✓	na
Semivolatiles	Hexachloroethane	WB	na	na	✓	✓	✓	na
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	na	na	✓	✓	✓	na
Semivolatiles	Naphthalene	WB	na	na	✓	✓	✓	na
Semivolatiles	Naphthalene, 1-methyl-	WB	na	na	✓	✓	✓	na
Semivolatiles	Naphthalene, 2-methyl-	WB	na	na	✓	✓	✓	na
Semivolatiles	Nitrobenzene	WB	na	na	✓	✓	✓	na
Semivolatiles	Phenanthrene	WB	na	na	✓	✓	✓	na
Semivolatiles	Pyrene	WB	na	na	✓	✓	✓	na
Semivolatiles	Retene	WB	na	na	✓	✓	✓	na
Metals	Antimony	WB	na	na	✓	✓	✓	na
Metals	Beryllium	WB	na	na			✓	na
Metals	Silver	WB	na	na	✓	✓	✓	na
Metals	Thallium	WB	na	na	✓	✓	✓	na

NOTE:

✓ - indicates that chemical was not detected for that species and sample type

na - chemical was not analyzed for that species and sample type

blank - indicates that chemical was detected for that species and sample type

FW - fillet without skin

Table F-4. Chemicals Not Detected in White Sturgeon

Chemical Group	Chemical	Sample Type	Site					
			6	7	8	9L	9U	13
WB - whole body								
Site 6 - located in the Columbia River between the Bonneville dam and the Dalles dam								
Site 7 - located in the Columbia River between the Dalles dam and the John Day dam								
Site 8 - located in the Columbia River between the John Day dam and the McNary dam								
Site 9L - located in the upper Columbia River below the Snake River								
Site 9U - located in the upper Columbia River above the Snake River								
Site 13 - located in the Snake River								

Table F-5. Chemicals Not Detected in Walleye

Chemical Group	Chemical	Sample Type	Site	
			7	30
Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	na	✓
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	na	✓
Dioxin/furans	OCDF	FS	na	✓
Guaiacols/Phenols	4-Chloroguaiacol	FS	na	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	na	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	na	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	na	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	na	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	na	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	na	✓
Guaiacols/Phenols	Tetrachloroguaiacol	FS	na	✓
Guaiacols/Phenols	2-Chlorophenol	FS	na	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	na	✓
Guaiacols/Phenols	2,4-Dichlorophenol	FS	na	✓
Guaiacols/Phenols	2,4-Dimethylphenol	FS	na	✓
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	na	✓
Guaiacols/Phenols	Pentachlorophenol	FS	na	✓
Guaiacols/Phenols	Phenol	FS	na	✓
Aroclors	Aroclor 1016	FS	na	✓
Aroclors	Aroclor 1221	FS	na	✓
Aroclors	Aroclor 1232	FS	na	✓
Aroclors	Aroclor 1242	FS	na	✓
Aroclors	Aroclor 1248	FS	na	✓
Aroclors	Aroclor 1260	FS	na	✓
PCB Congeners	PCB 126	FS	na	✓
PCB Congeners	PCB 157	FS	na	✓
PCB Congeners	PCB 169	FS	na	✓
Pesticides	Aldrin	FS	na	✓
Pesticides	Alpha-BHC	FS	na	✓
Pesticides	Alpha-Chlordene	FS	na	✓
Pesticides	Beta-BHC	FS	na	✓
Pesticides	cis-Chlordane (alpha-Chlordane)	FS	na	✓
Pesticides	cis-Nonachlor	FS	na	✓
Pesticides	DDD-o,p'	FS	na	✓
Pesticides	DDE-o,p'	FS	na	✓
Pesticides	DDT-o,p'	FS	na	✓
Pesticides	Delta-BHC	FS	na	✓
Pesticides	Endosulfan Sulfate	FS	na	✓
Pesticides	Gamma-Chlordane	FS	na	✓
Pesticides	gamma-Chlordene	FS	na	✓
Pesticides	Heptachlor	FS	na	✓
Pesticides	Heptachlor Epoxide	FS	na	✓
Pesticides	Hexachlorobenzene	FS	na	✓
Pesticides	Lindane	FS	na	✓
Pesticides	Mirex	FS	na	✓
Pesticides	Oxychlordane	FS	na	✓
Pesticides	Pentachloroanisol	FS	na	✓
Pesticides	Toxaphene	FS	na	✓
Pesticides	trans-Nonachlor	FS	na	✓
Semivolatiles	1,2,4-Trichlorobenzene	FS	na	✓
Semivolatiles	1,2-Diphenylhydrazine	FS	na	✓
Semivolatiles	2,4-Dinitrotoluene	FS	na	✓
Semivolatiles	2,6-Dinitrotoluene	FS	na	✓
Semivolatiles	2-Chloronaphthalene	FS	na	✓
Semivolatiles	4-Bromophenyl-Phenylether	FS	na	✓
Semivolatiles	4-Chlorophenyl-Phenylether	FS	na	✓
Semivolatiles	Acenaphthene	FS	na	✓
Semivolatiles	Acenaphthylene	FS	na	✓
Semivolatiles	Anthracene	FS	na	✓

Table F-5. Chemicals Not Detected in Walleye

Chemical Group	Chemical	Sample Type	Site	
			7	30
Semivolatiles	Benzene, 1,2-dichloro-	FS	na	✓
Semivolatiles	Benzene, 1,3-dichloro-	FS	na	✓
Semivolatiles	Benzene, 1,4-dichloro-	FS	na	✓
Semivolatiles	Benzo(a)anthracene	FS	na	✓
Semivolatiles	Benzo(a)pyrene	FS	na	✓
Semivolatiles	Benzo(g,h,i)perylene	FS	na	✓
Semivolatiles	Benzo[b]Fluoranthene	FS	na	✓
Semivolatiles	Benzo[k]fluoranthene	FS	na	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	na	✓
Semivolatiles	Chrysene	FS	na	✓
Semivolatiles	Dibenz[a,h]anthracene	FS	na	✓
Semivolatiles	Dibenzofuran	FS	na	✓
Semivolatiles	Fluoranthene	FS	na	✓
Semivolatiles	9H-Fluorene	FS	na	✓
Semivolatiles	Hexachlorobutadiene	FS	na	✓
Semivolatiles	Hexachloroethane	FS	na	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	na	✓
Semivolatiles	Naphthalene	FS	na	✓
Semivolatiles	Naphthalene, 1-methyl-	FS	na	✓
Semivolatiles	Nitrobenzene	FS	na	✓
Semivolatiles	Phenanthrene	FS	na	✓
Semivolatiles	Pyrene	FS	na	✓
Semivolatiles	Retene	FS	na	✓
Metals	Antimony	FS	na	✓
Metals	Beryllium	FS	na	✓
Metals	Cadmium	FS	na	✓
Metals	Lead	FS	na	✓
Metals	Silver	FS	na	✓
Metals	Vanadium	FS	na	✓
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	✓	
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	✓	
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	✓	
Dioxin/furans	OCDF	WB	✓	
Guaiacols/Phenols	4-Chloroguaiacol	WB	✓	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	✓	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	✓	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	✓	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	✓	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	✓	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	✓	✓
Guaiacols/Phenols	Tetrachloroguaiacol	WB	✓	✓
Guaiacols/Phenols	2-Chlorophenol	WB	✓	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	✓	✓
Guaiacols/Phenols	2,4-Dichlorophenol	WB	✓	✓
Guaiacols/Phenols	2,4-Dimethylphenol	WB	✓	✓
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	✓	na
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	✓	✓
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	✓	na
Guaiacols/Phenols	Pentachlorophenol	WB	✓	✓
Guaiacols/Phenols	Phenol	WB	✓	✓
Aroclors	Aroclor 1016	WB	✓	✓
Aroclors	Aroclor 1221	WB	✓	✓
Aroclors	Aroclor 1232	WB	✓	✓
Aroclors	Aroclor 1242	WB	✓	✓
Aroclors	Aroclor 1248	WB	✓	✓
PCB Congeners	PCB 126	WB		✓
PCB Congeners	PCB 157	WB		✓
PCB Congeners	PCB 169	WB	✓	✓
Pesticides	Aldrin	WB	✓	✓

Table F-5. Chemicals Not Detected in Walleye

Chemical Group	Chemical	Sample Type	Site	
			7	30
Pesticides	Alpha-BHC	WB	✓	✓
Pesticides	Alpha-Chlordene	WB	✓	✓
Pesticides	Beta-BHC	WB	✓	✓
Pesticides	cis-Nonachlor	WB		✓
Pesticides	DDT-o,p'	WB	✓	✓
Pesticides	Delta-BHC	WB	✓	✓
Pesticides	Endosulfan Sulfate	WB	✓	✓
Pesticides	gamma-Chlordene	WB	✓	✓
Pesticides	Heptachlor	WB	✓	✓
Pesticides	Heptachlor Epoxide	WB	✓	✓
Pesticides	Hexachlorobenzene	WB		✓
Pesticides	Lindane	WB	✓	✓
Pesticides	Mirex	WB		✓
Pesticides	Pentachloroanisol	WB	✓	
Pesticides	Toxaphene	WB	✓	✓
Semivolatiles	1,2,4-Trichlorobenzene	WB	✓	✓
Semivolatiles	1,2-Diphenylhydrazine	WB	✓	✓
Semivolatiles	2,4-Dinitrotoluene	WB	✓	✓
Semivolatiles	2,6-Dinitrotoluene	WB	✓	✓
Semivolatiles	2-Chloronaphthalene	WB	✓	✓
Semivolatiles	4-Bromophenyl-Phenylether	WB	✓	✓
Semivolatiles	4-Chlorophenyl-Phenylether	WB	✓	✓
Semivolatiles	Acenaphthene	WB	✓	✓
Semivolatiles	Acenaphthylene	WB	✓	✓
Semivolatiles	Anthracene	WB	✓	✓
Semivolatiles	Benzene, 1,2-dichloro-	WB	✓	✓
Semivolatiles	Benzene, 1,3-dichloro-	WB	✓	✓
Semivolatiles	Benzene, 1,4-dichloro-	WB	✓	✓
Semivolatiles	Benzo(a)anthracene	WB	✓	✓
Semivolatiles	Benzo(a)pyrene	WB	✓	✓
Semivolatiles	Benzo(g,h,i)perylene	WB	✓	✓
Semivolatiles	Benzo[b]Fluoranthene	WB	✓	✓
Semivolatiles	Benzo[k]fluoranthene	WB	✓	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	✓	✓
Semivolatiles	Chrysene	WB	✓	✓
Semivolatiles	Dibenz[a,h]anthracene	WB	✓	✓
Semivolatiles	Dibenzofuran	WB	✓	✓
Semivolatiles	Fluoranthene	WB	✓	✓
Semivolatiles	9H-Fluorene	WB	✓	✓
Semivolatiles	Hexachlorobutadiene	WB	✓	✓
Semivolatiles	Hexachloroethane	WB	✓	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	✓	✓
Semivolatiles	Naphthalene	WB	✓	✓
Semivolatiles	Naphthalene, 1-methyl-	WB	✓	
Semivolatiles	Naphthalene, 2-methyl-	WB	✓	
Semivolatiles	Nitrobenzene	WB	✓	✓
Semivolatiles	Phenanthrene	WB	✓	✓
Semivolatiles	Pyrene	WB	✓	✓
Semivolatiles	Retene	WB	✓	✓
Metals	Aluminum	WB	✓	
Metals	Antimony	WB	✓	✓
Metals	Beryllium	WB	✓	✓
Metals	Lead	WB		✓
Metals	Silver	WB	✓	✓
Metals	Thallium	WB	✓	✓

NOTE:

✓ - indicates that chemical was not detected for that species and sample type

na - chemical was not analyzed for that species and sample type

blank - indicates that chemical was detected for that species and sample type

Table F-5. Chemicals Not Detected in Walleye

Chemical Group	Chemical	Sample Type	Site	
			7	30
FS - fillet with skin				
WB - whole body				
Site 7 - located in the Columbia River between the Dalles dam and the John Day dam				
Site 30 - located in the Umatilla River				

Table F-6. Chemicals Not Detected in Rainbow Trout

Chemical Group	Chemical	Sample Type	Site			
			49	56	98	101
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS		na	✓	na
Guaiacols/Phenols	4-Chloroguaiacol	FS	✓	na	✓	na
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	✓	na	✓	na
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	✓	na	✓	na
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	✓	na	✓	na
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	✓	na	✓	na
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	✓	na	✓	na
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	✓	na	✓	na
Guaiacols/Phenols	Tetrachloroguaiacol	FS	✓	na	✓	na
Guaiacols/Phenols	2-Chlorophenol	FS	✓	na	✓	na
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	✓	na	✓	na
Guaiacols/Phenols	2,4-Dichlorophenol	FS	✓	na	✓	na
Guaiacols/Phenols	2,4-Dimethylphenol	FS	✓	na	✓	na
Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	✓	na	✓	na
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	✓	na	✓	na
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	✓	na	✓	na
Guaiacols/Phenols	Pentachlorophenol	FS	✓	na	✓	na
Guaiacols/Phenols	Phenol	FS	✓	na	✓	na
Aroclors	Aroclor 1016	FS	✓	na	✓	na
Aroclors	Aroclor 1221	FS	✓	na	✓	na
Aroclors	Aroclor 1232	FS	✓	na	✓	na
Aroclors	Aroclor 1242	FS	✓	na	✓	na
Aroclors	Aroclor 1248	FS	✓	na	✓	na
Aroclors	Aroclor 1260	FS	✓	na	✓	na
PCB Congeners	PCB 169	FS	✓	na	✓	na
Pesticides	Aldrin	FS	✓	na	✓	na
Pesticides	Alpha-BHC	FS	✓	na	✓	na
Pesticides	Alpha-Chlordene	FS	✓	na	✓	na
Pesticides	Beta-BHC	FS	✓	na	✓	na
Pesticides	cis-Chlordane (alpha-Chlordane)	FS	✓	na	✓	na
Pesticides	cis-Nonachlor	FS	✓	na	✓	na
Pesticides	DDD-o,p'	FS	✓	na	✓	na
Pesticides	DDE-o,p'	FS	✓	na	✓	na
Pesticides	DDT-o,p'	FS	✓	na	✓	na
Pesticides	DDD-p,p'	FS	✓	na	✓	na
Pesticides	DDMU	FS	✓	na	✓	na
Pesticides	Delta-BHC	FS	✓	na	✓	na
Pesticides	Endosulfan Sulfate	FS	✓	na	✓	na
Pesticides	Gamma-Chlordane	FS	✓	na	✓	na
Pesticides	gamma-Chlordene	FS	✓	na	✓	na
Pesticides	Heptachlor	FS	✓	na	✓	na
Pesticides	Heptachlor Epoxide	FS	✓	na	✓	na
Pesticides	Hexachlorobenzene	FS	✓	na	✓	na
Pesticides	Lindane	FS	✓	na	✓	na
Pesticides	Mirex	FS	✓	na	✓	na
Pesticides	Oxychlordane	FS	✓	na	✓	na
Pesticides	Pentachloroanisol	FS	✓	na	✓	na
Pesticides	Toxaphene	FS	✓	na	✓	na
Pesticides	trans-Nonachlor	FS	✓	na	✓	na
Semivolatiles	1,2,4-Trichlorobenzene	FS	✓	na	✓	na
Semivolatiles	1,2-Diphenylhydrazine	FS	✓	na	✓	na
Semivolatiles	2,4-Dinitrotoluene	FS	✓	na	✓	na
Semivolatiles	2,6-Dinitrotoluene	FS	✓	na	✓	na
Semivolatiles	2-Chloronaphthalene	FS	✓	na	✓	na
Semivolatiles	4-Bromophenyl-Phenylether	FS	✓	na	✓	na
Semivolatiles	4-Chlorophenyl-Phenylether	FS	✓	na	✓	na
Semivolatiles	Acenaphthene	FS	✓	na	✓	na
Semivolatiles	Acenaphthylene	FS	✓	na	✓	na
Semivolatiles	Anthracene	FS	✓	na	✓	na

Table F-6. Chemicals Not Detected in Rainbow Trout

Chemical Group	Chemical	Sample Type	Site			
			49	56	98	101
Semivolatiles	Benzene, 1,2-dichloro-	FS	✓	na	✓	na
Semivolatiles	Benzene, 1,3-dichloro-	FS	✓	na	✓	na
Semivolatiles	Benzene, 1,4-dichloro-	FS	✓	na	✓	na
Semivolatiles	Benzo(a)anthracene	FS	✓	na	✓	na
Semivolatiles	Benzo(a)pyrene	FS	✓	na	✓	na
Semivolatiles	Benzo(g,h,i)perylene	FS	✓	na	✓	na
Semivolatiles	Benzo[b]Fluoranthene	FS	✓	na	✓	na
Semivolatiles	Benzo[k]fluoranthene	FS	✓	na	✓	na
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	✓	na	✓	na
Semivolatiles	Chrysene	FS	✓	na	✓	na
Semivolatiles	Dibenz[a,h]anthracene	FS	✓	na	✓	na
Semivolatiles	Dibenzofuran	FS	✓	na	✓	na
Semivolatiles	Fluoranthene	FS	✓	na	✓	na
Semivolatiles	9H-Fluorene	FS	✓	na	✓	na
Semivolatiles	Hexachlorobutadiene	FS	✓	na	✓	na
Semivolatiles	Hexachloroethane	FS	✓	na	✓	na
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	✓	na	✓	na
Semivolatiles	Naphthalene	FS	✓	na	✓	na
Semivolatiles	Naphthalene, 1-methyl-	FS	✓	na	✓	na
Semivolatiles	Naphthalene, 2-methyl-	FS		na	✓	na
Semivolatiles	Nitrobenzene	FS	✓	na	✓	na
Semivolatiles	Phenanthrene	FS	✓	na	✓	na
Semivolatiles	Pyrene	FS	✓	na	✓	na
Semivolatiles	Retene	FS	✓	na	✓	na
Metals	Aluminum	FS	✓	na		na
Metals	Antimony	FS	✓	na	✓	na
Metals	Arsenic	FS	✓	na	✓	na
Metals	Cadmium	FS	✓	na		na
Metals	Chromium	FS	✓	na		na
Metals	Lead	FS	✓	na	✓	na
Metals	Silver	FS	✓	na	✓	na
Metals	Thallium	FS	✓	na	✓	na
Dioxin/furans	1,2,3,7,8-PeCDD	WB		✓		
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB		✓		
Dioxin/furans	1,2,3,7,8-PeCDF	WB		✓		
Dioxin/furans	2,3,4,7,8-PeCDF	WB		✓		
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB		✓		
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB		✓		
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB		✓		
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB		✓		
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB		✓		
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	✓	✓		
Dioxin/furans	OCDF	WB		✓		
Guaiacols/Phenols	4-Chloroguaiacol	WB	✓	✓	✓	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	✓	✓	✓	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	✓	✓	✓	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	✓	✓	✓	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	✓	✓	✓	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	✓	✓	✓	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	✓	✓	✓	✓
Guaiacols/Phenols	Tetrachloroguaiacol	WB	✓	✓	✓	✓
Guaiacols/Phenols	2-Chlorophenol	WB	✓	✓	✓	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dichlorophenol	WB	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dimethylphenol	WB	✓	✓	✓	✓
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	✓	✓	✓	na
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	✓	✓	✓	✓
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	✓	✓	✓	na
Guaiacols/Phenols	Pentachlorophenol	WB	✓	✓	✓	✓

Table F-6. Chemicals Not Detected in Rainbow Trout

Chemical Group	Chemical	Sample Type	Site			
			49	56	98	101
Guaiacols/Phenols	Phenol	WB	✓	✓	✓	✓
Aroclors	Aroclor 1016	WB	✓	✓	✓	✓
Aroclors	Aroclor 1221	WB	✓	✓	✓	✓
Aroclors	Aroclor 1232	WB	✓	✓	✓	✓
Aroclors	Aroclor 1242	WB	✓	✓	✓	✓
Aroclors	Aroclor 1248	WB	✓	✓	✓	✓
Aroclors	Aroclor 1254	WB				✓
Aroclors	Aroclor 1260	WB	✓	✓	✓	
PCB Congeners	PCB 157	WB				✓
PCB Congeners	PCB 169	WB	✓	✓	✓	✓
Pesticides	Aldrin	WB	✓	✓	✓	✓
Pesticides	Alpha-BHC	WB	✓	✓	✓	✓
Pesticides	Alpha-Chlordene	WB	✓	✓	✓	✓
Pesticides	Beta-BHC	WB	✓	✓	✓	✓
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	✓	✓	✓	✓
Pesticides	cis-Nonachlor	WB	✓	✓	✓	✓
Pesticides	DDD-o,p'	WB	✓	✓	✓	✓
Pesticides	DDE-o,p'	WB	✓	✓		
Pesticides	DDT-o,p'	WB	✓	✓	✓	✓
Pesticides	DDD-p,p'	WB			✓	
Pesticides	DDT-p,p'	WB		✓	✓	
Pesticides	DDMU	WB	✓	✓	✓	✓
Pesticides	Delta-BHC	WB	✓	✓	✓	✓
Pesticides	Endosulfan Sulfate	WB	✓	✓	✓	✓
Pesticides	Gamma-Chlordane	WB	✓	✓	✓	✓
Pesticides	gamma-Chlordene	WB	✓	✓	✓	✓
Pesticides	Heptachlor	WB	✓	✓	✓	✓
Pesticides	Heptachlor Epoxide	WB	✓	✓	✓	✓
Pesticides	Hexachlorobenzene	WB	✓	✓	✓	✓
Pesticides	Lindane	WB	✓	✓	✓	✓
Pesticides	Mirex	WB	✓	✓	✓	✓
Pesticides	Oxychlordane	WB	✓	✓	✓	✓
Pesticides	Pentachloroanisol	WB		✓	✓	✓
Pesticides	Toxaphene	WB	✓	✓	✓	✓
Pesticides	trans-Nonachlor	WB	✓	✓	✓	✓
Semivolatiles	1,2,4-Trichlorobenzene	WB	✓	✓	✓	✓
Semivolatiles	1,2-Diphenylhydrazine	WB	✓	✓	✓	✓
Semivolatiles	2,4-Dinitrotoluene	WB	✓	✓	✓	✓
Semivolatiles	2,6-Dinitrotoluene	WB	✓	✓	✓	✓
Semivolatiles	2-Chloronaphthalene	WB	✓	✓	✓	✓
Semivolatiles	4-Bromophenyl-Phenylether	WB	✓	✓	✓	✓
Semivolatiles	4-Chlorophenyl-Phenylether	WB	✓	✓	✓	✓
Semivolatiles	Acenaphthene	WB	✓	✓	✓	✓
Semivolatiles	Acenaphthylene	WB	✓	✓	✓	✓
Semivolatiles	Anthracene	WB		✓	✓	✓
Semivolatiles	Benzene, 1,2-dichloro-	WB	✓	✓	✓	✓
Semivolatiles	Benzene, 1,3-dichloro-	WB	✓	✓	✓	✓
Semivolatiles	Benzene, 1,4-dichloro-	WB	✓	✓	✓	✓
Semivolatiles	Benzo(a)anthracene	WB	✓	✓	✓	✓
Semivolatiles	Benzo(a)pyrene	WB	✓	✓	✓	✓
Semivolatiles	Benzo(g,h,i)perylene	WB	✓	✓	✓	✓
Semivolatiles	Benzo[b]Fluoranthene	WB	✓	✓	✓	✓
Semivolatiles	Benzo[k]fluoranthene	WB	✓	✓	✓	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	✓	✓	✓	✓
Semivolatiles	Chrysene	WB	✓	✓	✓	✓
Semivolatiles	Dibenz[a,h]anthracene	WB	✓	✓	✓	✓
Semivolatiles	Dibenzofuran	WB	✓	✓	✓	✓
Semivolatiles	Fluoranthene	WB		✓	✓	✓
Semivolatiles	9H-Fluorene	WB	✓	✓	✓	✓

Table F-6. Chemicals Not Detected in Rainbow Trout

Chemical Group	Chemical	Sample Type	Site			
			49	56	98	101
Semivolatiles	Hexachlorobutadiene	WB	✓	✓	✓	✓
Semivolatiles	Hexachloroethane	WB	✓	✓	✓	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	✓	✓	✓	✓
Semivolatiles	Naphthalene	WB	✓	✓	✓	✓
Semivolatiles	Naphthalene, 1-methyl-	WB	✓	✓	✓	✓
Semivolatiles	Naphthalene, 2-methyl-	WB	✓	✓	✓	✓
Semivolatiles	Nitrobenzene	WB	✓	✓	✓	✓
Semivolatiles	Phenanthrene	WB		✓	✓	✓
Semivolatiles	Pyrene	WB		✓	✓	✓
Semivolatiles	Retene	WB	✓	✓		✓
Metals	Antimony	WB	✓	✓	✓	✓
Metals	Arsenic	WB	✓		✓	
Metals	Beryllium	WB	✓	✓	✓	
Metals	Silver	WB	✓	✓	✓	✓
Metals	Thallium	WB	✓	✓	✓	✓

NOTE:

✓ - indicates that chemical was not detected for that species and sample type

na - chemical was not analyzed for that species and sample type

blank - indicates that chemical was detected for that species and sample type

FS - fillet with skin

WB - whole body

Site 49 - located in the Yakima River

Site 56 - located in the Klickitat River

Site 98 - located in the Deschutes River

Site 101 - located in the Umatilla River

Table F-7. Chemicals Not Detected in Coho Salmon

Chemical Group	Chemical	Sample Type	Site
			30
Dioxin/furans	1,2,3,7,8,9-HxCDD	E	✓
Guaiacols/Phenols	4-Chloroguaiacol	E	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	E	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	E	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	E	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	E	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	E	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	E	✓
Guaiacols/Phenols	Tetrachloroguaiacol	E	✓
Guaiacols/Phenols	2-Chlorophenol	E	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	E	✓
Guaiacols/Phenols	2,4-Dichlorophenol	E	✓
Guaiacols/Phenols	2,4-Dimethylphenol	E	✓
Guaiacols/Phenols	2,4,5-Trichlorophenol	E	✓
Guaiacols/Phenols	2,4,6-Trichlorophenol	E	✓
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	E	✓
Guaiacols/Phenols	Pentachlorophenol	E	✓
Guaiacols/Phenols	Phenol	E	✓
Metals	Antimony	E	✓
Metals	Barium	E	✓
Metals	Beryllium	E	✓
Metals	Cadmium	E	✓
Metals	Chromium	E	✓
Metals	Lead	E	✓
Metals	Mercury	E	✓
Metals	Silver	E	✓
Metals	Thallium	E	✓
Aroclors	Aroclor 1016	E	✓
Aroclors	Aroclor 1221	E	✓
Aroclors	Aroclor 1232	E	✓
Aroclors	Aroclor 1242	E	✓
Aroclors	Aroclor 1248	E	✓
Aroclors	Aroclor 1260	E	✓
PCB Congeners	PCB 126	E	✓
PCB Congeners	PCB 169	E	✓
Pesticides	Aldrin	E	✓
Pesticides	Alpha-BHC	E	✓
Pesticides	Alpha-Chlordene	E	✓
Pesticides	Beta-BHC	E	✓
Pesticides	cis-Chlordane (alpha-Chlordane)	E	✓
Pesticides	cis-Nonachlor	E	✓
Pesticides	DDD-o,p'	E	✓
Pesticides	DDE-o,p'	E	✓
Pesticides	DDT-o,p'	E	✓
Pesticides	DDT-p,p'	E	✓
Pesticides	DDMU	E	✓
Pesticides	Delta-BHC	E	✓
Pesticides	Endosulfan Sulfate	E	✓
Pesticides	Gamma-Chlordane	E	✓
Pesticides	Gamma-Chlordene	E	✓
Pesticides	Heptachlor	E	✓
Pesticides	Heptachlor Epoxide	E	✓
Pesticides	Hexachlorobenzene	E	✓
Pesticides	Lindane	E	✓
Pesticides	Mirex	E	✓
Pesticides	Oxychlordane	E	✓
Pesticides	Pentachloroanisol	E	✓
Pesticides	Toxaphene	E	✓

Table F-7. Chemicals Not Detected in Coho Salmon

Chemical Group	Chemical	Sample Type	Site
			30
Pesticides	trans-Nonachlor	E	✓
Semivolatiles	1,2,4-Trichlorobenzene	E	✓
Semivolatiles	1,2-Diphenylhydrazine	E	✓
Semivolatiles	2,4-Dinitrotoluene	E	✓
Semivolatiles	2,6-Dinitrotoluene	E	✓
Semivolatiles	2-Chloronaphthalene	E	✓
Semivolatiles	4-Bromophenyl-Phenylether	E	✓
Semivolatiles	4-Chlorophenyl-Phenylether	E	✓
Semivolatiles	Acenaphthene	E	✓
Semivolatiles	Acenaphthylene	E	✓
Semivolatiles	Anthracene	E	✓
Semivolatiles	Benzene, 1,2-dichloro-	E	✓
Semivolatiles	Benzene, 1,3-dichloro-	E	✓
Semivolatiles	Benzene, 1,4-dichloro-	E	✓
Semivolatiles	Benzo(a)anthracene	E	✓
Semivolatiles	Benzo(a)pyrene	E	✓
Semivolatiles	Benzo(g,h,i)perylene	E	✓
Semivolatiles	Benzo[b]Fluoranthene	E	✓
Semivolatiles	Benzo[k]fluoranthene	E	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	E	✓
Semivolatiles	Chrysene	E	✓
Semivolatiles	Dibenz[a,h]anthracene	E	✓
Semivolatiles	Dibenzofuran	E	✓
Semivolatiles	Fluoranthene	E	✓
Semivolatiles	9H-Fluorene	E	✓
Semivolatiles	Hexachlorobutadiene	E	✓
Semivolatiles	Hexachloroethane	E	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	E	✓
Semivolatiles	Naphthalene	E	✓
Semivolatiles	Naphthalene, 1-methyl-	E	✓
Semivolatiles	Naphthalene, 2-methyl-	E	✓
Semivolatiles	Nitrobenzene	E	✓
Semivolatiles	Phenanthrene	E	✓
Semivolatiles	Pyrene	E	✓
Semivolatiles	Retene	E	✓
Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	✓
Dioxin/furans	1,2,3,7,8-PeCDF	FS	✓
Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	✓
Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	✓
Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	✓
Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	✓
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	✓
Guaiacols/Phenols	4-Chloroguaiacol	FS	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	✓
Guaiacols/Phenols	Tetrachloroguaiacol	FS	✓
Guaiacols/Phenols	2-Chlorophenol	FS	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	✓
Guaiacols/Phenols	2,4-Dichlorophenol	FS	✓
Guaiacols/Phenols	2,4-Dimethylphenol	FS	✓
Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	✓
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	✓
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	✓
Guaiacols/Phenols	Pentachlorophenol	FS	✓

Table F-7. Chemicals Not Detected in Coho Salmon

Chemical Group	Chemical	Sample Type	Site
			30
Guaiacols/Phenols	Phenol	FS	✓
Metals	Aluminum	FS	✓
Metals	Antimony	FS	✓
Metals	Beryllium	FS	✓
Metals	Cadmium	FS	✓
Metals	Silver	FS	✓
Metals	Thallium	FS	✓
Aroclors	Aroclor 1016	FS	✓
Aroclors	Aroclor 1221	FS	✓
Aroclors	Aroclor 1232	FS	✓
Aroclors	Aroclor 1242	FS	✓
Aroclors	Aroclor 1248	FS	✓
PCB Congeners	PCB 118	FS	✓
PCB Congeners	PCB 157	FS	✓
PCB Congeners	PCB 167	FS	✓
PCB Congeners	PCB 169	FS	✓
PCB Congeners	PCB 170	FS	✓
PCB Congeners	PCB 180	FS	✓
PCB Congeners	PCB 189	FS	✓
Pesticides	Aldrin	FS	✓
Pesticides	Alpha-BHC	FS	✓
Pesticides	Alpha-Chlordene	FS	✓
Pesticides	Beta-BHC	FS	✓
Pesticides	cis-Chlordane (alpha-Chlordane)	FS	✓
Pesticides	cis-Nonachlor	FS	✓
Pesticides	DDE-o,p'	FS	✓
Pesticides	DDT-o,p'	FS	✓
Pesticides	DDE-p,p'	FS	✓
Pesticides	DDMU	FS	✓
Pesticides	Delta-BHC	FS	✓
Pesticides	Endosulfan Sulfate	FS	✓
Pesticides	Gamma-Chlordane	FS	✓
Pesticides	Gamma-Chlordene	FS	✓
Pesticides	Heptachlor	FS	✓
Pesticides	Heptachlor Epoxide	FS	✓
Pesticides	Hexachlorobenzene	FS	✓
Pesticides	Lindane	FS	✓
Pesticides	Mirex	FS	✓
Pesticides	Toxaphene	FS	✓
Semivolatiles	1,2,4-Trichlorobenzene	FS	✓
Semivolatiles	1,2-Diphenylhydrazine	FS	✓
Semivolatiles	2,4-Dinitrotoluene	FS	✓
Semivolatiles	2,6-Dinitrotoluene	FS	✓
Semivolatiles	2-Chloronaphthalene	FS	✓
Semivolatiles	4-Bromophenyl-Phenylether	FS	✓
Semivolatiles	4-Chlorophenyl-Phenylether	FS	✓
Semivolatiles	Acenaphthene	FS	✓
Semivolatiles	Acenaphthylene	FS	✓
Semivolatiles	Anthracene	FS	✓
Semivolatiles	Benzene, 1,2-dichloro-	FS	✓
Semivolatiles	Benzene, 1,3-dichloro-	FS	✓
Semivolatiles	Benzene, 1,4-dichloro-	FS	✓
Semivolatiles	Benzo(a)anthracene	FS	✓
Semivolatiles	Benzo(a)pyrene	FS	✓
Semivolatiles	Benzo(g,h,i)perylene	FS	✓
Semivolatiles	Benzo[b]Fluoranthene	FS	✓
Semivolatiles	Benzo[k]fluoranthene	FS	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	✓

Table F-7. Chemicals Not Detected in Coho Salmon

Chemical Group	Chemical	Sample Type	Site
			30
Semivolatiles	Chrysene	FS	✓
Semivolatiles	Dibenz[a,h]anthracene	FS	✓
Semivolatiles	Dibenzofuran	FS	✓
Semivolatiles	Fluoranthene	FS	✓
Semivolatiles	9H-Fluorene	FS	✓
Semivolatiles	Hexachlorobutadiene	FS	✓
Semivolatiles	Hexachloroethane	FS	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	✓
Semivolatiles	Naphthalene	FS	✓
Semivolatiles	Naphthalene, 1-methyl-	FS	✓
Semivolatiles	Naphthalene, 2-methyl-	FS	✓
Semivolatiles	Nitrobenzene	FS	✓
Semivolatiles	Phenanthrene	FS	✓
Semivolatiles	Pyrene	FS	✓
Semivolatiles	Retene	FS	✓
Dioxin/furans	2,3,7,8-TCDD	WB	✓
Dioxin/furans	1,2,3,7,8-PeCDD	WB	✓
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	✓
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	✓
Dioxin/furans	1,2,3,7,8-PeCDF	WB	✓
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	✓
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	✓
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	✓
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	✓
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	✓
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	✓
Guaiacols/Phenols	4-Chloroguaiacol	WB	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	✓
Guaiacols/Phenols	Tetrachloroguaiacol	WB	✓
Guaiacols/Phenols	2-Chlorophenol	WB	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	✓
Guaiacols/Phenols	2,4-Dichlorophenol	WB	✓
Guaiacols/Phenols	2,4-Dimethylphenol	WB	✓
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	✓
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	✓
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	✓
Guaiacols/Phenols	Pentachlorophenol	WB	✓
Guaiacols/Phenols	Phenol	WB	✓
Metals	Aluminum	WB	✓
Metals	Antimony	WB	✓
Metals	Beryllium	WB	✓
Metals	Silver	WB	✓
Metals	Thallium	WB	✓
Aroclors	Aroclor 1016	WB	✓
Aroclors	Aroclor 1221	WB	✓
Aroclors	Aroclor 1232	WB	✓
Aroclors	Aroclor 1242	WB	✓
Aroclors	Aroclor 1248	WB	✓
PCB Congeners	PCB 118	WB	✓
PCB Congeners	PCB 157	WB	✓
PCB Congeners	PCB 167	WB	✓
PCB Congeners	PCB 169	WB	✓
PCB Congeners	PCB 170	WB	✓

Table F-7. Chemicals Not Detected in Coho Salmon

Chemical Group	Chemical	Sample Type	Site
			30
PCB Congeners	PCB 180	WB	✓
PCB Congeners	PCB 189	WB	✓
Pesticides	Aldrin	WB	✓
Pesticides	Alpha-BHC	WB	✓
Pesticides	Alpha-Chlordene	WB	✓
Pesticides	Beta-BHC	WB	✓
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	✓
Pesticides	cis-Nonachlor	WB	✓
Pesticides	DDE-o,p'	WB	✓
Pesticides	DDT-o,p'	WB	✓
Pesticides	DDMU	WB	✓
Pesticides	Delta-BHC	WB	✓
Pesticides	Endosulfan Sulfate	WB	✓
Pesticides	Gamma-Chlordane	WB	✓
Pesticides	Gamma-Chlordene	WB	✓
Pesticides	Heptachlor	WB	✓
Pesticides	Heptachlor Epoxide	WB	✓
Pesticides	Lindane	WB	✓
Pesticides	Mirex	WB	✓
Pesticides	Toxaphene	WB	✓
Semivolatiles	1,2,4-Trichlorobenzene	WB	✓
Semivolatiles	1,2-Diphenylhydrazine	WB	✓
Semivolatiles	2,4-Dinitrotoluene	WB	✓
Semivolatiles	2,6-Dinitrotoluene	WB	✓
Semivolatiles	2-Chloronaphthalene	WB	✓
Semivolatiles	4-Bromophenyl-Phenylether	WB	✓
Semivolatiles	4-Chlorophenyl-Phenylether	WB	✓
Semivolatiles	Acenaphthene	WB	✓
Semivolatiles	Acenaphthylene	WB	✓
Semivolatiles	Anthracene	WB	✓
Semivolatiles	Benzene, 1,2-dichloro-	WB	✓
Semivolatiles	Benzene, 1,3-dichloro-	WB	✓
Semivolatiles	Benzene, 1,4-dichloro-	WB	✓
Semivolatiles	Benzo(a)anthracene	WB	✓
Semivolatiles	Benzo(a)pyrene	WB	✓
Semivolatiles	Benzo(g,h,i)perylene	WB	✓
Semivolatiles	Benzo[b]Fluoranthene	WB	✓
Semivolatiles	Benzo[k]fluoranthene	WB	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	✓
Semivolatiles	Chrysene	WB	✓
Semivolatiles	Dibenz[a,h]anthracene	WB	✓
Semivolatiles	Dibenzofuran	WB	✓
Semivolatiles	Fluoranthene	WB	✓
Semivolatiles	9H-Fluorene	WB	✓
Semivolatiles	Hexachlorobutadiene	WB	✓
Semivolatiles	Hexachloroethane	WB	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	✓
Semivolatiles	Naphthalene	WB	✓
Semivolatiles	Naphthalene, 1-methyl-	WB	✓
Semivolatiles	Naphthalene, 2-methyl-	WB	✓
Semivolatiles	Nitrobenzene	WB	✓
Semivolatiles	Phenanthrene	WB	✓
Semivolatiles	Pyrene	WB	✓
Semivolatiles	Retene	WB	✓

NOTE:

✓ - indicates that chemical was not detected for that species and sample type

na - chemical was not analyzed for that species and sample type

blank - indicates that chemical was detected for that species and sample type

Table F-7. Chemicals Not Detected in Coho Salmon

		Sample	Site
Chemical Group	Chemical	Type	30
E - egg			
FS - fillet with skin			
WB - whole body			
Site 30 - located in the Umatilla River			

Table F-8. Chemicals Not Detected in Fall Chinook Salmon

Chemical Group	Chemical	Sample Type	Site				
			8	14	30	48	56
Dioxin/furans	2,3,7,8-TCDD	E	✓	na	na	na	na
Dioxin/furans	1,2,3,7,8-PeCDD	E	✓	na	na	na	na
Dioxin/furans	1,2,3,4,7,8-HxCDD	E	✓	na	na	na	na
Dioxin/furans	1,2,3,6,7,8-HxCDD	E	✓	na	na	na	na
Dioxin/furans	1,2,3,7,8,9-HxCDD	E	✓	na	na	na	na
Dioxin/furans	1,2,3,7,8-PeCDF	E	✓	na	na	na	na
Dioxin/furans	2,3,4,7,8-PeCDF	E	✓	na	na	na	na
Dioxin/furans	1,2,3,4,7,8-HxCDF	E	✓	na	na	na	na
Dioxin/furans	1,2,3,6,7,8-HxCDF	E	✓	na	na	na	na
Dioxin/furans	1,2,3,7,8,9-HxCDF	E	✓	na	na	na	na
Dioxin/furans	2,3,4,6,7,8-HxCDF	E	✓	na	na	na	na
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	E	✓	na	na	na	na
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	E	✓	na	na	na	na
Dioxin/furans	OCDF	E	✓	na	na	na	na
Guaiacols/Phenols	4-Chloroguaiacol	E	✓	na	na	na	na
Guaiacols/Phenols	3,4-Dichloroguaiacol	E	✓	na	na	na	na
Guaiacols/Phenols	4,5-Dichloroguaiacol	E	✓	na	na	na	na
Guaiacols/Phenols	4,6-Dichloroguaiacol	E	✓	na	na	na	na
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	E	✓	na	na	na	na
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	E	✓	na	na	na	na
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	E	✓	na	na	na	na
Guaiacols/Phenols	Tetrachloroguaiacol	E	✓	na	na	na	na
Guaiacols/Phenols	2-Chlorophenol	E	✓	na	na	na	na
Guaiacols/Phenols	4-Chloro-3-methylphenol	E	✓	na	na	na	na
Guaiacols/Phenols	2,4-Dichlorophenol	E	✓	na	na	na	na
Guaiacols/Phenols	2,4-Dimethylphenol	E	✓	na	na	na	na
Guaiacols/Phenols	2,4,5-Trichlorophenol	E	✓	na	na	na	na
Guaiacols/Phenols	2,4,6-Trichlorophenol	E	✓	na	na	na	na
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	E	✓	na	na	na	na
Guaiacols/Phenols	Pentachlorophenol	E	✓	na	na	na	na
Guaiacols/Phenols	Phenol	E	✓	na	na	na	na
Aroclors	Aroclor 1016	E	✓	na	na	na	na
Aroclors	Aroclor 1221	E	✓	na	na	na	na
Aroclors	Aroclor 1232	E	✓	na	na	na	na
Aroclors	Aroclor 1242	E	✓	na	na	na	na
Aroclors	Aroclor 1248	E	✓	na	na	na	na
Aroclors	Aroclor 1260	E	✓	na	na	na	na
PCB Congeners	PCB 126	E	✓	na	na	na	na
PCB Congeners	PCB 169	E	✓	na	na	na	na
PCB Congeners	PCB 189	E	✓	na	na	na	na
Pesticides	Aldrin	E	✓	na	na	na	na
Pesticides	Alpha-BHC	E	✓	na	na	na	na
Pesticides	Alpha-Chlordene	E	✓	na	na	na	na
Pesticides	Beta-BHC	E	✓	na	na	na	na
Pesticides	cis-Nonachlor	E	✓	na	na	na	na
Pesticides	DDD-o,p'	E	✓	na	na	na	na
Pesticides	DDE-o,p'	E	✓	na	na	na	na
Pesticides	DDT-o,p'	E	✓	na	na	na	na
Pesticides	DDT-p,p'	E	✓	na	na	na	na
Pesticides	DDMU	E	✓	na	na	na	na
Pesticides	Delta-BHC	E	✓	na	na	na	na
Pesticides	Endosulfan Sulfate	E	✓	na	na	na	na
Pesticides	Gamma-Chlordane	E	✓	na	na	na	na
Pesticides	gamma-Chlordene	E	✓	na	na	na	na
Pesticides	Heptachlor	E	✓	na	na	na	na
Pesticides	Heptachlor Epoxide	E	✓	na	na	na	na
Pesticides	Lindane	E	✓	na	na	na	na

Table F-8. Chemicals Not Detected in Fall Chinook Salmon

Chemical Group	Chemical	Sample Type	Site				
			8	14	30	48	56
Pesticides	Mirex	E	✓	na	na	na	na
Pesticides	Oxychlorane	E	✓	na	na	na	na
Pesticides	Pentachloroanisol	E	✓	na	na	na	na
Pesticides	Toxaphene	E	✓	na	na	na	na
Semivolatiles	1,2,4-Trichlorobenzene	E	✓	na	na	na	na
Semivolatiles	1,2-Diphenylhydrazine	E	✓	na	na	na	na
Semivolatiles	2,4-Dinitrotoluene	E	✓	na	na	na	na
Semivolatiles	2,6-Dinitrotoluene	E	✓	na	na	na	na
Semivolatiles	2-Chloronaphthalene	E	✓	na	na	na	na
Semivolatiles	4-Bromophenyl-Phenylether	E	✓	na	na	na	na
Semivolatiles	4-Chlorophenyl-Phenylether	E	✓	na	na	na	na
Semivolatiles	Acenaphthene	E	✓	na	na	na	na
Semivolatiles	Acenaphthylene	E	✓	na	na	na	na
Semivolatiles	Anthracene	E	✓	na	na	na	na
Semivolatiles	Benzene, 1,2-dichloro-	E	✓	na	na	na	na
Semivolatiles	Benzene, 1,3-dichloro-	E	✓	na	na	na	na
Semivolatiles	Benzene, 1,4-dichloro-	E	✓	na	na	na	na
Semivolatiles	Benzo(a)anthracene	E	✓	na	na	na	na
Semivolatiles	Benzo(a)pyrene	E	✓	na	na	na	na
Semivolatiles	Benzo(g,h,i)perylene	E	✓	na	na	na	na
Semivolatiles	Benzo[b]Fluoranthene	E	✓	na	na	na	na
Semivolatiles	Benzo[k]fluoranthene	E	✓	na	na	na	na
Semivolatiles	bis(2-Chloroisopropyl)ether	E	✓	na	na	na	na
Semivolatiles	Chrysene	E	✓	na	na	na	na
Semivolatiles	Dibenz[a,h]anthracene	E	✓	na	na	na	na
Semivolatiles	Dibenzofuran	E	✓	na	na	na	na
Semivolatiles	Fluoranthene	E	✓	na	na	na	na
Semivolatiles	9H-Fluorene	E	✓	na	na	na	na
Semivolatiles	Hexachlorobutadiene	E	✓	na	na	na	na
Semivolatiles	Hexachloroethane	E	✓	na	na	na	na
Semivolatiles	Indeno(1,2,3-cd)pyrene	E	✓	na	na	na	na
Semivolatiles	Naphthalene	E	✓	na	na	na	na
Semivolatiles	Naphthalene, 1-methyl-	E	✓	na	na	na	na
Semivolatiles	Naphthalene, 2-methyl-	E	✓	na	na	na	na
Semivolatiles	Nitrobenzene	E	✓	na	na	na	na
Semivolatiles	Phenanthrene	E	✓	na	na	na	na
Semivolatiles	Pyrene	E	✓	na	na	na	na
Semivolatiles	Retene	E	✓	na	na	na	na
Metals	Aluminum	E	✓	na	na	na	na
Metals	Antimony	E	✓	na	na	na	na
Metals	Barium	E	✓	na	na	na	na
Metals	Beryllium	E	✓	na	na	na	na
Metals	Cadmium	E	✓	na	na	na	na
Metals	Chromium	E	✓	na	na	na	na
Metals	Lead	E	✓	na	na	na	na
Metals	Mercury	E	✓	na	na	na	na
Metals	Silver	E	✓	na	na	na	na
Metals	Thallium	E	✓	na	na	na	na
Dioxin/furans	2,3,7,8-TCDD	FS		✓		✓	✓
Dioxin/furans	1,2,3,7,8-PeCDD	FS	✓	✓			✓
Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	✓	✓	✓	✓	✓
Dioxin/furans	1,2,3,6,7,8-HxCDD	FS		✓		✓	✓
Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	✓	✓		✓	✓
Dioxin/furans	1,2,3,7,8-PeCDF	FS	✓		✓	✓	✓
Dioxin/furans	2,3,4,7,8-PeCDF	FS				✓	
Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	✓	✓	✓	✓	✓
Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	✓	✓	✓	✓	✓

Table F-8. Chemicals Not Detected in Fall Chinook Salmon

Chemical Group	Chemical	Sample Type	Site				
			8	14	30	48	56
Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	✓	✓	✓	✓	✓
Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	✓	✓	✓	✓	✓
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	✓	✓	✓	✓	✓
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	✓	✓	✓	✓	✓
Dioxin/furans	OCDF	FS	✓	✓	✓	✓	✓
Guaiacols/Phenols	4-Chloroguaiacol	FS	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	✓	✓	✓	✓	✓
Guaiacols/Phenols	Tetrachloroguaiacol	FS	✓	✓	✓	✓	✓
Guaiacols/Phenols	2-Chlorophenol	FS	✓	✓	✓	✓	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dichlorophenol	FS	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dimethylphenol	FS	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	✓	✓	✓	✓	✓
Guaiacols/Phenols	Pentachlorophenol	FS	✓	✓	✓	✓	✓
Guaiacols/Phenols	Phenol	FS	✓	✓	✓	✓	✓
Aroclors	Aroclor 1016	FS	✓	✓	✓	✓	✓
Aroclors	Aroclor 1221	FS	✓	✓	✓	✓	✓
Aroclors	Aroclor 1232	FS	✓	✓	✓	✓	✓
Aroclors	Aroclor 1242	FS	✓	✓	✓	✓	✓
Aroclors	Aroclor 1248	FS	✓	✓	✓	✓	✓
Aroclors	Aroclor 1260	FS	✓	✓	✓	✓	✓
PCB Congeners	PCB 126	FS	✓	✓	✓	✓	✓
PCB Congeners	PCB 169	FS	✓	✓	✓	✓	✓
Pesticides	Aldrin	FS	✓	✓	✓	✓	✓
Pesticides	Alpha-BHC	FS	✓	✓	✓	✓	✓
Pesticides	Alpha-Chlordene	FS	✓	✓	✓	✓	✓
Pesticides	Beta-BHC	FS	✓	✓	✓	✓	✓
Pesticides	cis-Chlordane (alpha-Chlordane)	FS	✓	✓	✓	✓	✓
Pesticides	cis-Nonachlor	FS	✓	✓	✓	✓	✓
Pesticides	DDD-o,p'	FS	✓	✓	✓	✓	✓
Pesticides	DDE-o,p'	FS	✓	✓	✓	✓	✓
Pesticides	DDT-o,p'	FS	✓	✓	✓	✓	✓
Pesticides	DDMU	FS	✓	✓	✓	✓	✓
Pesticides	Delta-BHC	FS	✓	✓	✓	✓	✓
Pesticides	Endosulfan Sulfate	FS	✓	✓	✓	✓	✓
Pesticides	Gamma-Chlordane	FS	✓	✓	✓	✓	✓
Pesticides	gamma-Chlordene	FS	✓	✓	✓	✓	✓
Pesticides	Heptachlor	FS	✓	✓	✓	✓	✓
Pesticides	Heptachlor Epoxide	FS	✓	✓	✓	✓	✓
Pesticides	Lindane	FS	✓	✓	✓	✓	✓
Pesticides	Mirex	FS	✓	✓	✓	✓	✓
Pesticides	Oxychlordane	FS	✓	✓	✓	✓	✓
Pesticides	Pentachloroanisol	FS	✓	✓	✓	✓	✓
Pesticides	Toxaphene	FS	✓	✓	✓	✓	✓
Semivolatiles	1,2,4-Trichlorobenzene	FS	✓	✓	✓	✓	✓
Semivolatiles	1,2-Diphenylhydrazine	FS	✓	✓	✓	✓	✓
Semivolatiles	2,4-Dinitrotoluene	FS	✓	✓	✓	✓	✓
Semivolatiles	2,6-Dinitrotoluene	FS	✓	✓	✓	✓	✓
Semivolatiles	2-Chloronaphthalene	FS	✓	✓	✓	✓	✓
Semivolatiles	4-Bromophenyl-Phenylether	FS	✓	✓	✓	✓	✓

Table F-8. Chemicals Not Detected in Fall Chinook Salmon

Chemical Group	Chemical	Sample Type	Site				
			8	14	30	48	56
Semivolatiles	4-Chlorophenyl-Phenylether	FS	✓	✓	✓	✓	✓
Semivolatiles	Acenaphthene	FS	✓	✓	✓	✓	✓
Semivolatiles	Acenaphthylene	FS	✓	✓	✓	✓	✓
Semivolatiles	Anthracene	FS	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,2-dichloro-	FS	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,3-dichloro-	FS	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,4-dichloro-	FS	✓	✓	✓	✓	✓
Semivolatiles	Benzo(a)anthracene	FS	✓	✓	✓	✓	✓
Semivolatiles	Benzo(a)pyrene	FS	✓	✓	✓	✓	✓
Semivolatiles	Benzo(g,h,i)perylene	FS	✓	✓	✓	✓	✓
Semivolatiles	Benzo[b]Fluoranthene	FS	✓	✓	✓	✓	✓
Semivolatiles	Benzo[k]fluoranthene	FS	✓	✓	✓	✓	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	✓	✓	✓	✓	✓
Semivolatiles	Chrysene	FS	✓	✓	✓	✓	✓
Semivolatiles	Dibenz[a,h]anthracene	FS	✓	✓	✓	✓	✓
Semivolatiles	Dibenzofuran	FS	✓	✓	✓	✓	✓
Semivolatiles	Fluoranthene	FS	✓	✓	✓	✓	✓
Semivolatiles	9H-Fluorene	FS	✓	✓	✓	✓	✓
Semivolatiles	Hexachlorobutadiene	FS	✓	✓	✓	✓	✓
Semivolatiles	Hexachloroethane	FS	✓	✓	✓	✓	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene	FS	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene, 1-methyl-	FS	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene, 2-methyl-	FS	✓	✓	✓	✓	✓
Semivolatiles	Nitrobenzene	FS	✓	✓	✓	✓	✓
Semivolatiles	Phenanthrene	FS	✓	✓	✓	✓	✓
Semivolatiles	Pyrene	FS	✓	✓	✓	✓	✓
Semivolatiles	Retene	FS	✓	✓	✓	✓	✓
Metals	Aluminum	FS			✓	✓	✓
Metals	Antimony	FS	✓	✓	✓	✓	✓
Metals	Barium	FS	✓	✓	✓		✓
Metals	Beryllium	FS	✓	✓	✓	✓	✓
Metals	Cadmium	FS	✓	✓	✓	✓	✓
Metals	Chromium	FS	✓	✓	✓		✓
Metals	Lead	FS	✓	✓			✓
Metals	Silver	FS	✓	✓	✓	✓	✓
Metals	Thallium	FS	✓	✓	✓	✓	✓
Metals	Vanadium	FS	✓	✓			✓
Dioxin/furans	2,3,7,8-TCDD	WB	✓	✓		✓	✓
Dioxin/furans	1,2,3,7,8-PeCDD	WB	✓	✓	✓		✓
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	✓	✓	✓	✓	✓
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	✓	✓			✓
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	✓	✓	✓	✓	✓
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	✓				✓
Dioxin/furans	OCDD	WB		✓	✓		✓
Dioxin/furans	1,2,3,7,8-PeCDF	WB	✓	✓	✓	✓	
Dioxin/furans	2,3,4,7,8-PeCDF	WB	✓			✓	
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	✓	✓	✓	✓	✓
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	✓	✓	✓	✓	✓
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	✓	✓	✓	✓	✓
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	✓	✓	✓	✓	✓
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	✓	✓	✓		✓
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	✓	✓	✓	✓	✓
Dioxin/furans	OCDF	WB	✓	✓	✓	✓	✓
Guaiacols/Phenols	4-Chloroguaiacol	WB	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	✓	✓	✓	✓	✓

Table F-8. Chemicals Not Detected in Fall Chinook Salmon

Chemical Group	Chemical	Sample Type	Site				
			8	14	30	48	56
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	✓	✓	✓	✓	✓
Guaiacols/Phenols	Tetrachloroguaiacol	WB	✓	✓	✓	✓	✓
Guaiacols/Phenols	2-Chlorophenol	WB	✓	✓	✓	✓	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dichlorophenol	WB	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dimethylphenol	WB	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	✓	✓	✓	✓	✓
Guaiacols/Phenols	Pentachlorophenol	WB	✓	✓	✓	✓	✓
Guaiacols/Phenols	Phenol	WB	✓	✓	✓	✓	✓
Aroclors	Aroclor 1016	WB	✓	✓	✓	✓	✓
Aroclors	Aroclor 1221	WB	✓	✓	✓	✓	✓
Aroclors	Aroclor 1232	WB	✓	✓	✓	✓	✓
Aroclors	Aroclor 1242	WB	✓	✓	✓	✓	✓
Aroclors	Aroclor 1248	WB	✓	✓	✓	✓	✓
Aroclors	Aroclor 1260	WB	✓	✓	✓	✓	✓
PCB Congeners	PCB 169	WB	✓	✓	✓	✓	✓
Pesticides	Aldrin	WB	✓	✓	✓	✓	✓
Pesticides	Alpha-BHC	WB	✓	✓	✓	✓	✓
Pesticides	Alpha-Chlordene	WB	✓	✓	✓	✓	✓
Pesticides	Beta-BHC	WB	✓	✓	✓	✓	✓
Pesticides	cis-Chlordane (alpha-Chlordane)	WB				✓	
Pesticides	cis-Nonachlor	WB		✓		✓	✓
Pesticides	DDD-o,p'	WB	✓			✓	✓
Pesticides	DDE-o,p'	WB	✓	✓	✓	✓	✓
Pesticides	DDT-o,p'	WB	✓	✓	✓	✓	✓
Pesticides	DDT-p,p'	WB	✓	✓			
Pesticides	DDMU	WB		✓		✓	✓
Pesticides	Delta-BHC	WB	✓	✓	✓	✓	✓
Pesticides	Endosulfan Sulfate	WB	✓	✓	✓	✓	✓
Pesticides	Gamma-Chlordane	WB	✓	✓	✓	✓	✓
Pesticides	gamma-Chlordene	WB	✓	✓	✓	✓	✓
Pesticides	Heptachlor	WB	✓	✓	✓	✓	✓
Pesticides	Heptachlor Epoxide	WB	✓	✓	✓	✓	✓
Pesticides	Lindane	WB	✓	✓	✓	✓	✓
Pesticides	Mirex	WB	✓	✓	✓	✓	✓
Pesticides	Oxychlordane	WB	✓	✓	✓	✓	✓
Pesticides	Pentachloroanisol	WB	✓	✓	✓	✓	✓
Pesticides	Toxaphene	WB	✓	✓	✓	✓	✓
Semivolatiles	1,2,4-Trichlorobenzene	WB	✓	✓	✓	✓	✓
Semivolatiles	1,2-Diphenylhydrazine	WB	✓	✓	✓	✓	✓
Semivolatiles	2,4-Dinitrotoluene	WB	✓	✓	✓	✓	✓
Semivolatiles	2,6-Dinitrotoluene	WB	✓	✓	✓	✓	✓
Semivolatiles	2-Chloronaphthalene	WB	✓	✓	✓	✓	✓
Semivolatiles	4-Bromophenyl-Phenylether	WB	✓	✓	✓	✓	✓
Semivolatiles	4-Chlorophenyl-Phenylether	WB	✓	✓	✓	✓	✓
Semivolatiles	Acenaphthene	WB	✓	✓	✓	✓	✓
Semivolatiles	Acenaphthylene	WB	✓	✓	✓	✓	✓
Semivolatiles	Anthracene	WB	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,2-dichloro-	WB	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,3-dichloro-	WB	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,4-dichloro-	WB	✓	✓	✓	✓	✓
Semivolatiles	Benzo(a)anthracene	WB	✓	✓	✓	✓	✓

Table F-8. Chemicals Not Detected in Fall Chinook Salmon

Chemical Group	Chemical	Sample Type	Site				
			8	14	30	48	56
Semivolatiles	Benzo(a)pyrene	WB	✓	✓	✓	✓	✓
Semivolatiles	Benzo(g,h,i)perylene	WB	✓	✓	✓	✓	✓
Semivolatiles	Benzo[b]Fluoranthene	WB	✓	✓	✓	✓	✓
Semivolatiles	Benzo[k]fluoranthene	WB	✓	✓	✓	✓	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	✓	✓	✓	✓	✓
Semivolatiles	Chrysene	WB	✓	✓	✓	✓	✓
Semivolatiles	Dibenz[a,h]anthracene	WB	✓	✓	✓	✓	✓
Semivolatiles	Dibenzofuran	WB	✓	✓	✓	✓	✓
Semivolatiles	Fluoranthene	WB	✓	✓	✓	✓	✓
Semivolatiles	9H-Fluorene	WB	✓	✓	✓	✓	✓
Semivolatiles	Hexachlorobutadiene	WB	✓	✓	✓	✓	✓
Semivolatiles	Hexachloroethane	WB	✓	✓	✓	✓	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene	WB	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene, 1-methyl-	WB	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene, 2-methyl-	WB	✓	✓	✓	✓	✓
Semivolatiles	Nitrobenzene	WB	✓	✓	✓	✓	✓
Semivolatiles	Phenanthrene	WB	✓	✓	✓	✓	✓
Semivolatiles	Pyrene	WB	✓	✓	✓	✓	✓
Semivolatiles	Retene	WB	✓	✓	✓	✓	✓
Metals	Aluminum	WB	✓	✓	✓		✓
Metals	Antimony	WB	✓	✓	✓	✓	✓
Metals	Barium	WB	✓	✓	✓		✓
Metals	Beryllium	WB	✓	✓	✓	✓	✓
Metals	Chromium	WB	✓				
Metals	Silver	WB	✓	✓	✓	✓	✓
Metals	Thallium	WB	✓	✓	✓	✓	✓

NOTE:

✓ - indicates that chemical was not detected for that species and sample type

na - chemical was not analyzed for that species and sample type

blank - indicates that chemical was detected for that species and sample type

E - egg

FS - fillet with skin

WB - whole body

Site 8 - located in the Columbia River between the John Day dam and the McNary dam

Site 14 - located in the upper Columbia River above the Snake River

Site 30 - located in the Umatilla River

Site 48 - located in the Yakima River

Site 56 - located in the Klickitat River

Table F-9. Chemicals Not Detected in Spring Chinook Salmon

Chemical Group	Chemical	Sample Type	Site							
			21	30	48	51	56	62	63	94
Dioxin/furans	1,2,3,7,8-PeCDF	E	na	✓	na	na	na	na	na	
Dioxin/furans	1,2,3,4,7,8-HxCDF	E	na	✓	na	na	na	na	na	✓
Dioxin/furans	1,2,3,7,8,9-HxCDF	E	na	✓	na	na	na	na	na	✓
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	E	na	✓	na	na	na	na	na	✓
Dioxin/furans	OCDF	E	na	✓	na	na	na	na	na	
Guaiacols/Phenols	4-Chloroguaiacol	E	na	✓	na	na	na	na	na	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	E	na	✓	na	na	na	na	na	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	E	na	✓	na	na	na	na	na	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	E	na	✓	na	na	na	na	na	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	E	na	✓	na	na	na	na	na	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	E	na	✓	na	na	na	na	na	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	E	na	✓	na	na	na	na	na	✓
Guaiacols/Phenols	Tetrachloroguaiacol	E	na	✓	na	na	na	na	na	✓
Guaiacols/Phenols	2-Chlorophenol	E	na	✓	na	na	na	na	na	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	E	na	✓	na	na	na	na	na	✓
Guaiacols/Phenols	2,4-Dichlorophenol	E	na	✓	na	na	na	na	na	✓
Guaiacols/Phenols	2,4-Dimethylphenol	E	na	✓	na	na	na	na	na	✓
Guaiacols/Phenols	2,4,5-Trichlorophenol	E	na	✓	na	na	na	na	na	✓
Guaiacols/Phenols	2,4,6-Trichlorophenol	E	na	✓	na	na	na	na	na	✓
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	E	na	✓	na	na	na	na	na	✓
Guaiacols/Phenols	Pentachlorophenol	E	na	✓	na	na	na	na	na	✓
Guaiacols/Phenols	Phenol	E	na	✓	na	na	na	na	na	✓
Aroclors	Aroclor 1016	E	na	✓	na	na	na	na	na	✓
Aroclors	Aroclor 1221	E	na	✓	na	na	na	na	na	✓
Aroclors	Aroclor 1232	E	na	✓	na	na	na	na	na	✓
Aroclors	Aroclor 1242	E	na	✓	na	na	na	na	na	✓
Aroclors	Aroclor 1248	E	na	✓	na	na	na	na	na	✓
Aroclors	Aroclor 1260	E	na	✓	na	na	na	na	na	✓
PCB Congeners	PCB 169	E	na	✓	na	na	na	na	na	✓
Pesticides	Aldrin	E	na	✓	na	na	na	na	na	✓
Pesticides	Alpha-BHC	E	na	✓	na	na	na	na	na	✓
Pesticides	Alpha-Chlordene	E	na	✓	na	na	na	na	na	✓
Pesticides	Beta-BHC	E	na	✓	na	na	na	na	na	✓
Pesticides	cis-Chlordane (alpha-Chlordane)	E	na	✓	na	na	na	na	na	✓
Pesticides	cis-Nonachlor	E	na	✓	na	na	na	na	na	✓
Pesticides	DDD-o,p'	E	na	✓	na	na	na	na	na	✓
Pesticides	DDE-o,p'	E	na	✓	na	na	na	na	na	✓
Pesticides	DDT-o,p'	E	na	✓	na	na	na	na	na	✓
Pesticides	DDMU	E	na	✓	na	na	na	na	na	✓
Pesticides	Delta-BHC	E	na	✓	na	na	na	na	na	✓
Pesticides	Endosulfan Sulfate	E	na	✓	na	na	na	na	na	✓
Pesticides	Gamma-Chlordane	E	na	✓	na	na	na	na	na	✓
Pesticides	gamma-Chlordene	E	na	✓	na	na	na	na	na	✓
Pesticides	Heptachlor	E	na	✓	na	na	na	na	na	✓
Pesticides	Heptachlor Epoxide	E	na	✓	na	na	na	na	na	✓
Pesticides	Lindane	E	na		na	na	na	na	na	✓
Pesticides	Mirex	E	na	✓	na	na	na	na	na	✓
Pesticides	Oxychlordane	E	na	✓	na	na	na	na	na	✓
Pesticides	Pentachloroanisol	E	na	✓	na	na	na	na	na	
Pesticides	Toxaphene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	1,2,4-Trichlorobenzene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	1,2-Diphenylhydrazine	E	na	✓	na	na	na	na	na	✓
Semivolatiles	2,4-Dinitrotoluene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	2,6-Dinitrotoluene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	2-Chloronaphthalene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	4-Bromophenyl-Phenylether	E	na	✓	na	na	na	na	na	✓
Semivolatiles	4-Chlorophenyl-Phenylether	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Acenaphthene	E	na		na	na	na	na	na	✓
Semivolatiles	Acenaphthylene	E	na	✓	na	na	na	na	na	✓

Table F-9. Chemicals Not Detected in Spring Chinook Salmon

Chemical Group	Chemical	Sample Type	Site							
			21	30	48	51	56	62	63	94
Semivolatiles	Anthracene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Benzene, 1,2-dichloro-	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Benzene, 1,3-dichloro-	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Benzene, 1,4-dichloro-	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Benzo(a)anthracene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Benzo(a)pyrene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Benzo(g,h,i)perylene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Benzo[b]Fluoranthene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Benzo[k]fluoranthene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Chrysene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Dibenz[a,h]anthracene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Dibenzofuran	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Fluoranthene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	9H-Fluorene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Hexachlorobutadiene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Hexachloroethane	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Naphthalene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Naphthalene, 1-methyl-	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Naphthalene, 2-methyl-	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Nitrobenzene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Phenanthrene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Pyrene	E	na	✓	na	na	na	na	na	✓
Semivolatiles	Retene	E	na	✓	na	na	na	na	na	✓
Metals	Aluminum	E	na	✓	na	na	na	na	na	✓
Metals	Antimony	E	na	✓	na	na	na	na	na	✓
Metals	Barium	E	na	✓	na	na	na	na	na	✓
Metals	Beryllium	E	na	✓	na	na	na	na	na	✓
Metals	Chromium	E	na	✓	na	na	na	na	na	✓
Metals	Mercury	E	na	✓	na	na	na	na	na	✓
Metals	Silver	E	na	✓	na	na	na	na	na	✓
Metals	Thallium	E	na	✓	na	na	na	na	na	✓
Metals	Vanadium	E	na	✓	na	na	na	na	na	✓
Dioxin/furans	2,3,7,8-TCDD	FS		✓				✓	✓	✓
Dioxin/furans	1,2,3,4,7,8-HxCDD	FS			✓		✓			
Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	✓	✓			✓		✓	
Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	✓		✓		✓	✓	✓	✓
Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	✓							
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	✓		✓		✓			
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	✓	✓	✓			✓	✓	
Dioxin/furans	OCDF	FS		✓	✓			✓	✓	✓
Guaiacols/Phenols	4-Chloroguaiacol	FS	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	Tetrachloroguaiacol	FS	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2-Chlorophenol	FS	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dichlorophenol	FS	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dimethylphenol	FS	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	Pentachlorophenol	FS	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	Phenol	FS	✓	✓	✓	✓	✓	✓	✓	✓

Table F-9. Chemicals Not Detected in Spring Chinook Salmon

Chemical Group	Chemical	Sample Type	Site							
			21	30	48	51	56	62	63	94
Aroclors	Aroclor 1016	FS	✓	✓	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1221	FS	✓	✓	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1232	FS	✓	✓	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1242	FS	✓	✓	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1248	FS	✓	✓	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1260	FS	✓	✓	✓	✓	✓	✓	✓	✓
PCB Congeners	PCB 126	FS	✓				✓			
PCB Congeners	PCB 169	FS	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Aldrin	FS	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Alpha-BHC	FS	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Alpha-Chlordene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Beta-BHC	FS	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	cis-Chlordane (alpha-Chlordane)	FS	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	cis-Nonachlor	FS	✓	✓	✓	✓			✓	✓
Pesticides	DDD-o,p'	FS	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	DDE-o,p'	FS	✓	✓	✓	✓	✓		✓	✓
Pesticides	DDT-o,p'	FS	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	DDMU	FS	✓	✓	✓	✓			✓	✓
Pesticides	Delta-BHC	FS	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Endosulfan Sulfate	FS	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Gamma-Chlordane	FS	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	gamma-Chlordene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Heptachlor	FS	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Heptachlor Epoxide	FS	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Hexachlorobenzene	FS				✓				
Pesticides	Lindane	FS	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Mirex	FS	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Oxychlordane	FS	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Pentachloroanisole	FS	✓	✓		✓	✓	✓	✓	✓
Pesticides	Toxaphene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	trans-Nonachlor	FS		✓						
Semivolatiles	1,2,4-Trichlorobenzene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	1,2-Diphenylhydrazine	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	2,4-Dinitrotoluene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	2,6-Dinitrotoluene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	2-Chloronaphthalene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	4-Bromophenyl-Phenylether	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	4-Chlorophenyl-Phenylether	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Acenaphthene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Acenaphthylene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Anthracene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,2-dichloro-	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,3-dichloro-	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,4-dichloro-	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo(a)anthracene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo(a)pyrene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo(g,h,i)perylene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo[b]fluoranthene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo[k]fluoranthene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Chrysene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Dibenz[a,h]anthracene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Dibenzofuran	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Fluoranthene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	9H-Fluorene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Hexachlorobutadiene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Hexachloroethane	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene	FS	✓	✓	✓	✓	✓	✓	✓	✓

Table F-9. Chemicals Not Detected in Spring Chinook Salmon

Chemical Group	Chemical	Sample Type	Site							
			21	30	48	51	56	62	63	94
Semivolatiles	Naphthalene, 1-methyl-	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene, 2-methyl-	FS	✓	✓	✓		✓	✓		
Semivolatiles	Nitrobenzene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Phenanthrene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Pyrene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Retene	FS	✓	✓	✓	✓	✓	✓	✓	✓
Metals	Aluminum	FS	✓	✓			✓			
Metals	Antimony	FS	✓	✓	✓	✓	✓	✓	✓	✓
Metals	Barium	FS	✓	✓	✓	✓	✓	✓	✓	✓
Metals	Beryllium	FS	✓	✓	✓	✓	✓	✓	✓	✓
Metals	Cadmium	FS	✓							
Metals	Chromium	FS		✓	✓	✓				✓
Metals	Cobalt	FS				✓				✓
Metals	Lead	FS	✓	✓	✓	✓		✓	✓	
Metals	Mercury	FS	✓		✓			✓		
Metals	Nickel	FS	✓					✓		
Metals	Silver	FS	✓	✓	✓	✓	✓	✓	✓	✓
Metals	Thallium	FS	✓	✓	✓	✓	✓	✓	✓	✓
Metals	Vanadium	FS	✓	✓	✓	✓	✓	✓	✓	✓
Dioxin/furans	2,3,7,8-TCDD	WB	✓		✓		✓	✓	✓	✓
Dioxin/furans	1,2,3,7,8-PeCDD	WB	✓						✓	✓
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	✓					✓		✓
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB					✓			
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB		✓						
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB								✓
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB			✓				✓	✓
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB		✓	✓		✓	✓	✓	✓
Dioxin/furans	OCDF	WB		✓						✓
Guaiacols/Phenols	4-Chloroguaiacol	WB	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	Tetrachloroguaiacol	WB	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2-Chlorophenol	WB	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dichlorophenol	WB	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dimethylphenol	WB	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	Pentachlorophenol	WB	✓	✓	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	Phenol	WB	✓	✓	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1016	WB	✓	✓	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1221	WB	✓	✓	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1232	WB	✓	✓	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1242	WB	✓	✓	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1248	WB	✓	✓	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1260	WB	✓	✓	✓	✓	✓	✓	✓	✓
PCB Congeners	PCB 169	WB	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Aldrin	WB	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Alpha-BHC	WB	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Alpha-Chlordene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Beta-BHC	WB	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	✓	✓	✓	✓		✓	✓	✓
Pesticides	cis-Nonachlor	WB	✓	✓	✓	✓		✓	✓	✓
Pesticides	DDD-o,p'	WB	✓	✓	✓	✓	✓	✓	✓	✓

Table F-9. Chemicals Not Detected in Spring Chinook Salmon

Chemical Group	Chemical	Sample Type	Site							
			21	30	48	51	56	62	63	94
Pesticides	DDE-o,p'	WB		✓	✓	✓		✓	✓	✓
Pesticides	DDT-o,p'	WB	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	DDMU	WB	✓	✓	✓	✓		✓	✓	✓
Pesticides	Delta-BHC	WB	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Endosulfan Sulfate	WB	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Gamma-Chlordane	WB	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	gamma-Chlordene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Heptachlor	WB	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Heptachlor Epoxide	WB	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Hexachlorobenzene	WB				✓		✓	✓	
Pesticides	Lindane	WB	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Mirex	WB	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Oxychlordane	WB	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	Pentachloroanisol	WB		✓			✓	✓	✓	
Pesticides	Toxaphene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Pesticides	trans-Nonachlor	WB		✓						
Semivolatiles	1,2,4-Trichlorobenzene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	1,2-Diphenylhydrazine	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	2,4-Dinitrotoluene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	2,6-Dinitrotoluene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	2-Chloronaphthalene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	4-Bromophenyl-Phenylether	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	4-Chlorophenyl-Phenylether	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Acenaphthene	WB	✓	✓	✓		✓	✓	✓	✓
Semivolatiles	Acenaphthylene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Anthracene	WB	✓	✓	✓		✓	✓	✓	✓
Semivolatiles	Benzene, 1,2-dichloro-	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,3-dichloro-	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,4-dichloro-	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo(a)anthracene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo(a)pyrene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo(g,h,i)perylene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo[b]Fluoranthene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo[k]fluoranthene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Chrysene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Dibenz[a,h]anthracene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Dibenzofuran	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Fluoranthene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	9H-Fluorene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Hexachlorobutadiene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Hexachloroethane	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene, 1-methyl-	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene, 2-methyl-	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Nitrobenzene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Phenanthrene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Semivolatiles	Pyrene	WB		✓	✓	✓	✓	✓	✓	
Semivolatiles	Retene	WB	✓	✓	✓	✓	✓	✓	✓	✓
Metals	Aluminum	WB	✓	✓	✓	✓		✓	✓	✓
Metals	Antimony	WB	✓	✓	✓	✓	✓	✓	✓	✓
Metals	Barium	WB	✓		✓	✓	✓	✓	✓	✓
Metals	Beryllium	WB	✓	✓	✓	✓	✓	✓	✓	✓
Metals	Lead	WB	✓					✓		
Metals	Mercury	WB	✓		✓	✓		✓	✓	
Metals	Nickel	WB		✓	✓	✓		✓	✓	✓
Metals	Silver	WB	✓	✓	✓	✓	✓	✓	✓	✓
Metals	Thallium	WB	✓	✓	✓	✓	✓	✓	✓	✓

Table F-9. Chemicals Not Detected in Spring Chinook Salmon

Chemical Group	Chemical	Sample Type	Site							
			21	30	48	51	56	62	63	94
NOTE:										
✓ - indicates that chemical was not detected for that species and sample type										
na - chemical was not analyzed for that species and sample type										
blank - indicates that chemical was detected for that species and sample type										
E - egg										
FS - fillet with skin										
WB - whole body										
Site 21 - located in the Willamette River										
Site 30 - located in the Umatilla River										
Site 48 - located in the Yakima River										
Site 51 - located in the Wenatchee River										
Site 56 - located in the Klickitat River										
Site 62 - located in the Little White Salmon River										
Site 63 - located in the Wind River										
Site 94 - located in the Grand Rhonde River										

Table F-10. Chemicals Not Detected in Steelhead

Chemical Group	Chemical	Sample Type	Site					
			8	25	48	56	93	96
Dioxin/furans	2,3,7,8-TCDD	E	✓	na	na	na	na	na
Dioxin/furans	1,2,3,7,8-PeCDD	E	✓	na	na	na	na	na
Dioxin/furans	1,2,3,4,7,8-HxCDD	E	✓	na	na	na	na	na
Dioxin/furans	1,2,3,6,7,8-HxCDD	E	✓	na	na	na	na	na
Dioxin/furans	1,2,3,7,8,9-HxCDD	E	✓	na	na	na	na	na
Dioxin/furans	1,2,3,7,8-PeCDF	E	✓	na	na	na	na	na
Dioxin/furans	2,3,4,7,8-PeCDF	E	✓	na	na	na	na	na
Dioxin/furans	1,2,3,4,7,8-HxCDF	E	✓	na	na	na	na	na
Dioxin/furans	1,2,3,6,7,8-HxCDF	E	✓	na	na	na	na	na
Dioxin/furans	1,2,3,7,8,9-HxCDF	E	✓	na	na	na	na	na
Dioxin/furans	2,3,4,6,7,8-HxCDF	E	✓	na	na	na	na	na
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	E	✓	na	na	na	na	na
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	E	✓	na	na	na	na	na
Dioxin/furans	OCDF	E	✓	na	na	na	na	na
Guaiacols/Phenols	4-Chloroguaiacol	E	✓	na	na	na	na	na
Guaiacols/Phenols	3,4-Dichloroguaiacol	E	✓	na	na	na	na	na
Guaiacols/Phenols	4,5-Dichloroguaiacol	E	✓	na	na	na	na	na
Guaiacols/Phenols	4,6-Dichloroguaiacol	E	✓	na	na	na	na	na
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	E	✓	na	na	na	na	na
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	E	✓	na	na	na	na	na
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	E	✓	na	na	na	na	na
Guaiacols/Phenols	Tetrachloroguaiacol	E	✓	na	na	na	na	na
Guaiacols/Phenols	2-Chlorophenol	E	✓	na	na	na	na	na
Guaiacols/Phenols	4-Chloro-3-methylphenol	E	✓	na	na	na	na	na
Guaiacols/Phenols	2,4-Dichlorophenol	E	✓	na	na	na	na	na
Guaiacols/Phenols	2,4-Dimethylphenol	E	✓	na	na	na	na	na
Guaiacols/Phenols	2,4,5-Trichlorophenol	E	✓	na	na	na	na	na
Guaiacols/Phenols	2,4,6-Trichlorophenol	E	✓	na	na	na	na	na
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	E	✓	na	na	na	na	na
Guaiacols/Phenols	Pentachlorophenol	E	✓	na	na	na	na	na
Guaiacols/Phenols	Phenol	E	✓	na	na	na	na	na
Aroclors	Aroclor 1016	E	✓	na	na	na	na	na
Aroclors	Aroclor 1221	E	✓	na	na	na	na	na
Aroclors	Aroclor 1232	E	✓	na	na	na	na	na
Aroclors	Aroclor 1242	E	✓	na	na	na	na	na
Aroclors	Aroclor 1248	E	✓	na	na	na	na	na
Aroclors	Aroclor 1260	E	✓	na	na	na	na	na
PCB Congeners	PCB 169	E	✓	na	na	na	na	na
PCB Congeners	PCB 189	E	✓	na	na	na	na	na
Pesticides	Aldrin	E	✓	na	na	na	na	na
Pesticides	Alpha-BHC	E	✓	na	na	na	na	na
Pesticides	Alpha-Chlordene	E	✓	na	na	na	na	na
Pesticides	Beta-BHC	E	✓	na	na	na	na	na
Pesticides	cis-Nonachlor	E	✓	na	na	na	na	na
Pesticides	DDD-o,p'	E	✓	na	na	na	na	na
Pesticides	DDE-o,p'	E	✓	na	na	na	na	na
Pesticides	DDT-o,p'	E	✓	na	na	na	na	na
Pesticides	DDT-p,p'	E	✓	na	na	na	na	na
Pesticides	DDMU	E	✓	na	na	na	na	na
Pesticides	Delta-BHC	E	✓	na	na	na	na	na
Pesticides	Endosulfan Sulfate	E	✓	na	na	na	na	na
Pesticides	Gamma-Chlordane	E	✓	na	na	na	na	na
Pesticides	gamma-Chlordene	E	✓	na	na	na	na	na
Pesticides	Heptachlor	E	✓	na	na	na	na	na
Pesticides	Heptachlor Epoxide	E	✓	na	na	na	na	na
Pesticides	Lindane	E	✓	na	na	na	na	na
Pesticides	Mirex	E	✓	na	na	na	na	na
Pesticides	Oxychlordane	E	✓	na	na	na	na	na
Pesticides	Pentachloroanisol	E	✓	na	na	na	na	na

Table F-10. Chemicals Not Detected in Steelhead

Chemical Group	Chemical	Sample Type	Site					
			8	25	48	56	93	96
Pesticides	Toxaphene	E	✓	na	na	na	na	na
Semivolatiles	1,2,4-Trichlorobenzene	E	✓	na	na	na	na	na
Semivolatiles	1,2-Diphenylhydrazine	E	✓	na	na	na	na	na
Semivolatiles	2,4-Dinitrotoluene	E	✓	na	na	na	na	na
Semivolatiles	2,6-Dinitrotoluene	E	✓	na	na	na	na	na
Semivolatiles	2-Chloronaphthalene	E	✓	na	na	na	na	na
Semivolatiles	4-Bromophenyl-Phenylether	E	✓	na	na	na	na	na
Semivolatiles	4-Chlorophenyl-Phenylether	E	✓	na	na	na	na	na
Semivolatiles	Acenaphthene	E	✓	na	na	na	na	na
Semivolatiles	Acenaphthylene	E	✓	na	na	na	na	na
Semivolatiles	Anthracene	E	✓	na	na	na	na	na
Semivolatiles	Benzene, 1,2-dichloro-	E	✓	na	na	na	na	na
Semivolatiles	Benzene, 1,3-dichloro-	E	✓	na	na	na	na	na
Semivolatiles	Benzene, 1,4-dichloro-	E	✓	na	na	na	na	na
Semivolatiles	Benzo(a)anthracene	E	✓	na	na	na	na	na
Semivolatiles	Benzo(a)pyrene	E	✓	na	na	na	na	na
Semivolatiles	Benzo(g,h,i)perylene	E	✓	na	na	na	na	na
Semivolatiles	Benzo[b]Fluoranthene	E	✓	na	na	na	na	na
Semivolatiles	Benzo[k]fluoranthene	E	✓	na	na	na	na	na
Semivolatiles	bis(2-Chloroisopropyl)ether	E	✓	na	na	na	na	na
Semivolatiles	Chrysene	E	✓	na	na	na	na	na
Semivolatiles	Dibenz[a,h]anthracene	E	✓	na	na	na	na	na
Semivolatiles	Dibenzofuran	E	✓	na	na	na	na	na
Semivolatiles	Fluoranthene	E	✓	na	na	na	na	na
Semivolatiles	9H-Fluorene	E	✓	na	na	na	na	na
Semivolatiles	Hexachlorobutadiene	E	✓	na	na	na	na	na
Semivolatiles	Hexachloroethane	E	✓	na	na	na	na	na
Semivolatiles	Indeno(1,2,3-cd)pyrene	E	✓	na	na	na	na	na
Semivolatiles	Naphthalene	E	✓	na	na	na	na	na
Semivolatiles	Naphthalene, 1-methyl-	E	✓	na	na	na	na	na
Semivolatiles	Naphthalene, 2-methyl-	E	✓	na	na	na	na	na
Semivolatiles	Nitrobenzene	E	✓	na	na	na	na	na
Semivolatiles	Phenanthrene	E	✓	na	na	na	na	na
Semivolatiles	Pyrene	E	✓	na	na	na	na	na
Semivolatiles	Retene	E	✓	na	na	na	na	na
Metals	Antimony	E	✓	na	na	na	na	na
Metals	Arsenic	E	✓	na	na	na	na	na
Metals	Barium	E	✓	na	na	na	na	na
Metals	Beryllium	E	✓	na	na	na	na	na
Metals	Mercury	E	✓	na	na	na	na	na
Metals	Silver	E	✓	na	na	na	na	na
Metals	Thallium	E	✓	na	na	na	na	na
Dioxin/furans	2,3,7,8-TCDD	FS	✓			✓		
Dioxin/furans	1,2,3,4,7,8-HxCDD	FS				✓		
Dioxin/furans	1,2,3,6,7,8-HxCDD	FS				✓		
Dioxin/furans	1,2,3,7,8,9-HxCDD	FS		✓				
Dioxin/furans	1,2,3,7,8-PeCDF	FS				✓		
Dioxin/furans	1,2,3,4,7,8-HxCDF	FS				✓	✓	
Dioxin/furans	1,2,3,6,7,8-HxCDF	FS		✓		✓		
Dioxin/furans	1,2,3,7,8,9-HxCDF	FS		✓	✓	✓		
Dioxin/furans	2,3,4,6,7,8-HxCDF	FS		✓		✓		
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS			✓	✓		
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	✓	✓		✓	✓	✓
Dioxin/furans	OCDF	FS		✓	✓	✓	✓	
Guaiacols/Phenols	4-Chloroguaiacol	FS	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	✓	✓	✓	✓	✓	✓

Table F-10. Chemicals Not Detected in Steelhead

Chemical Group	Chemical	Sample Type	Site					
			8	25	48	56	93	96
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	Tetrachloroguaiacol	FS	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2-Chlorophenol	FS	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dichlorophenol	FS	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dimethylphenol	FS	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	Pentachlorophenol	FS	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	Phenol	FS	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1016	FS	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1221	FS	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1232	FS	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1242	FS	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1248	FS	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1260	FS	✓	✓	✓	✓	✓	✓
PCB Congeners	PCB 169	FS	✓	✓	✓	✓	✓	✓
Pesticides	Aldrin	FS	✓	✓	✓	✓	✓	✓
Pesticides	Alpha-BHC	FS	✓	✓	✓	✓	✓	✓
Pesticides	Alpha-Chlordane	FS	✓	✓	✓	✓	✓	✓
Pesticides	Beta-BHC	FS	✓	✓	✓	✓	✓	✓
Pesticides	cis-Chlordane (alpha-Chlordane)	FS	✓	✓	✓	✓	✓	✓
Pesticides	cis-Nonachlor	FS	✓	✓	✓	✓	✓	✓
Pesticides	DDD-o,p'	FS	✓	✓	✓	✓	✓	✓
Pesticides	DDE-o,p'	FS	✓	✓	✓	✓	✓	✓
Pesticides	DDT-o,p'	FS	✓	✓	✓	✓	✓	✓
Pesticides	DDT-p,p'	FS	✓	✓	✓	✓	✓	✓
Pesticides	DDMU	FS	✓	✓	✓	✓	✓	✓
Pesticides	Delta-BHC	FS	✓	✓	✓	✓	✓	✓
Pesticides	Endosulfan Sulfate	FS	✓	✓	✓	✓	✓	✓
Pesticides	Gamma-Chlordane	FS	✓	✓	✓	✓	✓	✓
Pesticides	gamma-Chlordane	FS	✓	✓	✓	✓	✓	✓
Pesticides	Heptachlor	FS	✓	✓	✓	✓	✓	✓
Pesticides	Heptachlor Epoxide	FS	✓	✓	✓	✓	✓	✓
Pesticides	Lindane	FS	✓	✓	✓	✓	✓	✓
Pesticides	Mirex	FS	✓	✓	✓	✓	✓	✓
Pesticides	Oxychlordane	FS	✓	✓	✓	✓	✓	✓
Pesticides	Pentachloroanisol	FS	✓	✓	✓	✓	✓	✓
Pesticides	Toxaphene	FS	✓	✓	✓	✓	✓	✓
Pesticides	trans-Nonachlor	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	1,2,4-Trichlorobenzene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	1,2-Diphenylhydrazine	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	2,4-Dinitrotoluene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	2,6-Dinitrotoluene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	2-Chloronaphthalene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	4-Bromophenyl-Phenylether	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	4-Chlorophenyl-Phenylether	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Acenaphthene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Acenaphthylene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Anthracene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,2-dichloro-	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,3-dichloro-	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,4-dichloro-	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo(a)anthracene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo(a)pyrene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo(g,h,i)perylene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo[b]Fluoranthene	FS	✓	✓	✓	✓	✓	✓

Table F-10. Chemicals Not Detected in Steelhead

Chemical Group	Chemical	Sample Type	Site					
			8	25	48	56	93	96
Semivolatiles	Benzo[k]fluoranthene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Chrysene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Dibenz[a,h]anthracene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Dibenzofuran	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Fluoranthene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	9H-Fluorene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Hexachlorobutadiene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Hexachloroethane	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene, 1-methyl-	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene, 2-methyl-	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Nitrobenzene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Phenanthrene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Pyrene	FS	✓	✓	✓	✓	✓	✓
Semivolatiles	Retene	FS	✓	✓	✓	✓	✓	✓
Metals	Aluminum	FS		✓		✓		
Metals	Antimony	FS	✓	✓	✓	✓	✓	✓
Metals	Barium	FS		✓		✓		
Metals	Beryllium	FS	✓	✓	✓	✓		
Metals	Chromium	FS				✓	✓	✓
Metals	Lead	FS		✓	✓	✓		✓
Metals	Silver	FS	✓	✓	✓	✓	✓	✓
Metals	Thallium	FS	✓	✓	✓	✓	✓	✓
Metals	Vanadium	FS		✓	✓			
Dioxin/furans	2,3,7,8-TCDD	WB				✓	✓	
Dioxin/furans	1,2,3,7,8-PeCDD	WB		✓				
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB		✓		✓		
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB		✓				
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB		✓		✓	✓	
Dioxin/furans	1,2,3,7,8-PeCDF	WB		✓				
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB		✓		✓		
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB			✓	✓		
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	✓	✓	✓	✓		
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB				✓		
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	✓	✓	✓	✓		
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	✓	✓	✓	✓	✓	
Dioxin/furans	OCDF	WB		✓		✓		
Guaiacols/Phenols	4-Chloroguaiacol	WB	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	Tetrachloroguaiacol	WB	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2-Chlorophenol	WB	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dichlorophenol	WB	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4-Dimethylphenol	WB	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	Pentachlorophenol	WB	✓	✓	✓	✓	✓	✓
Guaiacols/Phenols	Phenol	WB	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1016	WB	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1221	WB	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1232	WB	✓	✓	✓	✓	✓	✓

Table F-10. Chemicals Not Detected in Steelhead

Chemical Group	Chemical	Sample Type	Site					
			8	25	48	56	93	96
Aroclors	Aroclor 1242	WB	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1248	WB	✓	✓	✓	✓	✓	✓
Aroclors	Aroclor 1260	WB	✓			✓	✓	✓
PCB Congeners	PCB 169	WB	✓	✓	✓	✓	✓	✓
Pesticides	Aldrin	WB	✓	✓	✓	✓	✓	✓
Pesticides	Alpha-BHC	WB	✓	✓	✓	✓	✓	✓
Pesticides	Alpha-Chlordene	WB	✓	✓	✓	✓	✓	✓
Pesticides	Beta-BHC	WB	✓	✓	✓	✓	✓	✓
Pesticides	cis-Chlordane (alpha-Chlordane)	WB		✓	✓			
Pesticides	cis-Nonachlor	WB	✓		✓			
Pesticides	DDD-o,p'	WB	✓	✓	✓	✓		✓
Pesticides	DDE-o,p'	WB				✓		
Pesticides	DDT-o,p'	WB	✓	✓	✓	✓		✓
Pesticides	DDT-p,p'	WB			✓			
Pesticides	DDMU	WB	✓		✓			
Pesticides	Delta-BHC	WB	✓	✓	✓	✓	✓	✓
Pesticides	Endosulfan Sulfate	WB	✓	✓	✓	✓	✓	✓
Pesticides	Gamma-Chlordane	WB	✓	✓	✓	✓	✓	✓
Pesticides	gamma-Chlordene	WB	✓	✓	✓	✓	✓	✓
Pesticides	Heptachlor	WB	✓	✓	✓	✓	✓	✓
Pesticides	Heptachlor Epoxide	WB	✓	✓	✓	✓	✓	✓
Pesticides	Lindane	WB	✓	✓	✓	✓	✓	✓
Pesticides	Mirex	WB	✓	✓	✓	✓	✓	✓
Pesticides	Oxychlordane	WB	✓	✓	✓	✓	✓	✓
Pesticides	Pentachloroanisol	WB	✓		✓		✓	✓
Pesticides	Toxaphene	WB	✓	✓			✓	✓
Semivolatiles	1,2,4-Trichlorobenzene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	1,2-Diphenylhydrazine	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	2,4-Dinitrotoluene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	2,6-Dinitrotoluene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	2-Chloronaphthalene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	4-Bromophenyl-Phenylether	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	4-Chlorophenyl-Phenylether	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Acenaphthene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Acenaphthylene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Anthracene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,2-dichloro-	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,3-dichloro-	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzene, 1,4-dichloro-	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo(a)anthracene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo(a)pyrene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo(g,h,i)perylene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo[b]Fluoranthene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Benzo[k]fluoranthene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Chrysene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Dibenz[a,h]anthracene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Dibenzofuran	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Fluoranthene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	9H-Fluorene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Hexachlorobutadiene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Hexachloroethane	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene, 1-methyl-	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Naphthalene, 2-methyl-	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Nitrobenzene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Phenanthrene	WB	✓	✓	✓	✓	✓	✓
Semivolatiles	Pyrene	WB	✓	✓	✓	✓	✓	✓

Table F-10. Chemicals Not Detected in Steelhead

Chemical Group	Chemical	Sample Type	Site					
			8	25	48	56	93	96
Semivolatiles	Retene	WB	✓	✓	✓	✓	✓	✓
Metals	Aluminum	WB		✓		✓		✓
Metals	Antimony	WB	✓	✓	✓	✓	✓	✓
Metals	Barium	WB	✓			✓		
Metals	Beryllium	WB	✓	✓	✓	✓		
Metals	Lead	WB		✓	✓			
Metals	Silver	WB	✓	✓	✓	✓	✓	✓
Metals	Thallium	WB	✓	✓	✓	✓	✓	✓

NOTE:

✓ - indicates that chemical was not detected for that species and sample type

na - chemical was not analyzed for that species and sample type

blank - indicates that chemical was detected for that species and sample type

E - egg

FS - fillet with skin

WB - whole body

Site 8 - located in the Columbia River between the John Day dam and the McNary dam

Site 25 - located in the Hood River

Site 48 - located in the Yakima River

Site 56 - located in the Klickitat River

Site 93 - located in the Snake River

Site 96 - located in the Clearwater River

Table F-11. Chemicals Not Detected in Eulachon

Chemical Group	Chemical	Sample Type	Site 3
Guaiacols/Phenols	4-Chloroguaiacol	WB	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	✓
Guaiacols/Phenols	Tetrachloroguaiacol	WB	✓
Guaiacols/Phenols	2-Chlorophenol	WB	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	✓
Guaiacols/Phenols	2,4-Dichlorophenol	WB	✓
Guaiacols/Phenols	2,4-Dimethylphenol	WB	✓
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	✓
Guaiacols/Phenols	Pentachlorophenol	WB	✓
Guaiacols/Phenols	Phenol	WB	✓
Aroclors	Aroclor 1016	WB	✓
Aroclors	Aroclor 1221	WB	✓
Aroclors	Aroclor 1232	WB	✓
Aroclors	Aroclor 1242	WB	✓
Aroclors	Aroclor 1248	WB	✓
Aroclors	Aroclor 1254	WB	✓
Aroclors	Aroclor 1260	WB	✓
PCB Congeners	PCB 126	WB	✓
PCB Congeners	PCB 169	WB	✓
Pesticides	Aldrin	WB	✓
Pesticides	Alpha-BHC	WB	✓
Pesticides	Alpha-Chlordene	WB	✓
Pesticides	Beta-BHC	WB	✓
Pesticides	cis-Chlordane (alpha-Chlordane)	WB	✓
Pesticides	cis-Nonachlor	WB	✓
Pesticides	DDD-o,p'	WB	✓
Pesticides	DDE-o,p'	WB	✓
Pesticides	DDT-o,p'	WB	✓
Pesticides	DDD-p,p'	WB	✓
Pesticides	DDT-p,p'	WB	✓
Pesticides	DDMU	WB	✓
Pesticides	Delta-BHC	WB	✓
Pesticides	Endosulfan Sulfate	WB	✓
Pesticides	Gamma-Chlordane	WB	✓
Pesticides	Gamma-Chlordene	WB	✓
Pesticides	Heptachlor	WB	✓
Pesticides	Heptachlor Epoxide	WB	✓
Pesticides	Hexachlorobenzene	WB	✓
Pesticides	Lindane	WB	✓
Pesticides	Mirex	WB	✓
Pesticides	Oxychlordane	WB	✓
Pesticides	Pentachloroanisol	WB	✓
Pesticides	Toxaphene	WB	✓
Pesticides	trans-Nonachlor	WB	✓
Semivolatiles	1,2,4-Trichlorobenzene	WB	✓
Semivolatiles	1,2-Diphenylhydrazine	WB	✓
Semivolatiles	2,4-Dinitrotoluene	WB	✓
Semivolatiles	2,6-Dinitrotoluene	WB	✓
Semivolatiles	2-Chloronaphthalene	WB	✓
Semivolatiles	4-Bromophenyl-Phenylether	WB	✓
Semivolatiles	4-Chlorophenyl-Phenylether	WB	✓
Semivolatiles	Acenaphthene	WB	✓

Table F-11. Chemicals Not Detected in Eulachon

Chemical Group	Chemical	Sample Type	Site 3
Semivolatiles	Acenaphthylene	WB	✓
Semivolatiles	Anthracene	WB	✓
Semivolatiles	Benzene, 1,2-dichloro-	WB	✓
Semivolatiles	Benzene, 1,3-dichloro-	WB	✓
Semivolatiles	Benzene, 1,4-dichloro-	WB	✓
Semivolatiles	Benzo(a)anthracene	WB	✓
Semivolatiles	Benzo(a)pyrene	WB	✓
Semivolatiles	Benzo(g,h,i)perylene	WB	✓
Semivolatiles	Benzo[b]fluoranthene	WB	✓
Semivolatiles	Benzo[k]fluoranthene	WB	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	✓
Semivolatiles	Chrysene	WB	✓
Semivolatiles	Dibenz[a,h]anthracene	WB	✓
Semivolatiles	Dibenzofuran	WB	✓
Semivolatiles	Fluoranthene	WB	✓
Semivolatiles	Hexachlorobutadiene	WB	✓
Semivolatiles	Hexachloroethane	WB	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	✓
Semivolatiles	Naphthalene	WB	✓
Semivolatiles	Naphthalene, 1-methyl-	WB	✓
Semivolatiles	Nitrobenzene	WB	✓
Semivolatiles	Pyrene	WB	✓
Semivolatiles	Retene	WB	✓
Metals	Antimony	WB	✓
Metals	Beryllium	WB	✓
Metals	Chromium	WB	✓
Metals	Mercury	WB	✓
Metals	Silver	WB	✓
Metals	Thallium	WB	✓

NOTE:

✓ - indicates that chemical was not detected for that species and sample type

na - chemical was not analyzed for that species and sample type

blank - indicates that chemical was detected for that species and sample type

WB - whole body

Site 3 - located in the lower Columbia River between the mouth and Bonneville dam

Table F-12. Chemicals Not Detected in Pacific Lamprey

Chemical Group	Chemical	Sample Type	Site	
			21	24
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	FS	✓	na
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	FS	✓	na
Dioxin/furans	OCDF	FS	✓	na
Guaiacols/Phenols	4-Chloroguaiacol	FS	✓	na
Guaiacols/Phenols	3,4-Dichloroguaiacol	FS	✓	na
Guaiacols/Phenols	4,5-Dichloroguaiacol	FS	✓	na
Guaiacols/Phenols	4,6-Dichloroguaiacol	FS	✓	na
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	FS	✓	na
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	FS	✓	na
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	FS	✓	na
Guaiacols/Phenols	Tetrachloroguaiacol	FS	✓	na
Guaiacols/Phenols	2-Chlorophenol	FS	✓	na
Guaiacols/Phenols	4-Chloro-3-methylphenol	FS	✓	na
Guaiacols/Phenols	2,4-Dichlorophenol	FS	✓	na
Guaiacols/Phenols	2,4-Dimethylphenol	FS	✓	na
Guaiacols/Phenols	2,4,5-Trichlorophenol	FS	✓	na
Guaiacols/Phenols	2,4,6-Trichlorophenol	FS	✓	na
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	FS	✓	na
Guaiacols/Phenols	Pentachlorophenol	FS	✓	na
Guaiacols/Phenols	Phenol	FS	✓	na
Aroclors	Aroclor 1016	FS	✓	na
Aroclors	Aroclor 1221	FS	✓	na
Aroclors	Aroclor 1232	FS	✓	na
Aroclors	Aroclor 1242	FS	✓	na
Aroclors	Aroclor 1248	FS	✓	na
Aroclors	Aroclor 1260	FS	✓	na
PCB Congeners	PCB 169	FS	✓	na
Pesticides	Aldrin	FS	✓	na
Pesticides	Alpha-BHC	FS	✓	na
Pesticides	Alpha-Chlordene	FS	✓	na
Pesticides	Beta-BHC	FS	✓	na
Pesticides	DDD-o,p'	FS	✓	na
Pesticides	DDT-o,p'	FS	✓	na
Pesticides	Delta-BHC	FS	✓	na
Pesticides	Endosulfan Sulfate	FS	✓	na
Pesticides	Gamma-Chlordene	FS	✓	na
Pesticides	Heptachlor	FS	✓	na
Pesticides	Heptachlor Epoxide	FS	✓	na
Pesticides	Lindane	FS	✓	na
Pesticides	Mirex	FS	✓	na
Pesticides	Oxychlordane	FS	✓	na
Pesticides	Toxaphene	FS	✓	na
Semivolatiles	1,2,4-Trichlorobenzene	FS	✓	na
Semivolatiles	1,2-Diphenylhydrazine	FS	✓	na
Semivolatiles	2,4-Dinitrotoluene	FS	✓	na
Semivolatiles	2,6-Dinitrotoluene	FS	✓	na
Semivolatiles	2-Chloronaphthalene	FS	✓	na
Semivolatiles	4-Bromophenyl-Phenylether	FS	✓	na
Semivolatiles	4-Chlorophenyl-Phenylether	FS	✓	na
Semivolatiles	Acenaphthene	FS	✓	na
Semivolatiles	Acenaphthylene	FS	✓	na
Semivolatiles	Anthracene	FS	✓	na
Semivolatiles	Benzene, 1,2-dichloro-	FS	✓	na
Semivolatiles	Benzene, 1,3-dichloro-	FS	✓	na
Semivolatiles	Benzene, 1,4-dichloro-	FS	✓	na
Semivolatiles	Benzo(a)anthracene	FS	✓	na
Semivolatiles	Benzo(a)pyrene	FS	✓	na
Semivolatiles	Benzo(g,h,i)perylene	FS	✓	na

Table F-12. Chemicals Not Detected in Pacific Lamprey

Chemical Group	Chemical	Sample Type	Site	
			21	24
Semivolatiles	Benzo[b]Fluoranthene	FS	✓	na
Semivolatiles	Benzo[k]fluoranthene	FS	✓	na
Semivolatiles	bis(2-Chloroisopropyl)ether	FS	✓	na
Semivolatiles	Chrysene	FS	✓	na
Semivolatiles	Dibenz[a,h]anthracene	FS	✓	na
Semivolatiles	Dibenzofuran	FS	✓	na
Semivolatiles	Fluoranthene	FS	✓	na
Semivolatiles	9H-Fluorene	FS	✓	na
Semivolatiles	Hexachlorobutadiene	FS	✓	na
Semivolatiles	Hexachloroethane	FS	✓	na
Semivolatiles	Indeno(1,2,3-cd)pyrene	FS	✓	na
Semivolatiles	Naphthalene	FS	✓	na
Semivolatiles	Naphthalene, 1-methyl-	FS	✓	na
Semivolatiles	Nitrobenzene	FS	✓	na
Semivolatiles	Phenanthrene	FS	✓	na
Semivolatiles	Pyrene	FS	✓	na
Semivolatiles	Retene	FS	✓	na
Metals	Aluminum	FS	✓	na
Metals	Antimony	FS	✓	na
Metals	Barium	FS	✓	na
Metals	Beryllium	FS	✓	na
Metals	Lead	FS	✓	na
Metals	Mercury	FS	✓	na
Metals	Nickel	FS	✓	na
Metals	Silver	FS	✓	na
Metals	Thallium	FS	✓	na
Dioxin/furans	1,2,3,7,8-PeCDD	WB		✓
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB		✓
Dioxin/furans	OCDD	WB		✓
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB		✓
Guaiacols/Phenols	4-Chloroguaiacol	WB	✓	✓
Guaiacols/Phenols	3,4-Dichloroguaiacol	WB	✓	✓
Guaiacols/Phenols	4,5-Dichloroguaiacol	WB	✓	✓
Guaiacols/Phenols	4,6-Dichloroguaiacol	WB	✓	✓
Guaiacols/Phenols	3,4,5-Trichloroguaiacol	WB	✓	✓
Guaiacols/Phenols	3,4,6-Trichloroguaiacol	WB	✓	✓
Guaiacols/Phenols	4,5,6-Trichloroguaiacol	WB	✓	✓
Guaiacols/Phenols	Tetrachloroguaiacol	WB	✓	✓
Guaiacols/Phenols	2-Chlorophenol	WB	✓	✓
Guaiacols/Phenols	4-Chloro-3-methylphenol	WB	✓	✓
Guaiacols/Phenols	2,4-Dichlorophenol	WB	✓	✓
Guaiacols/Phenols	2,4-Dimethylphenol	WB	✓	✓
Guaiacols/Phenols	2,4,5-Trichlorophenol	WB	✓	✓
Guaiacols/Phenols	2,4,6-Trichlorophenol	WB	✓	✓
Guaiacols/Phenols	2,3,4,6-Tetrachlorophenol	WB	✓	✓
Guaiacols/Phenols	Pentachlorophenol	WB	✓	
Guaiacols/Phenols	Phenol	WB	✓	
Aroclors	Aroclor 1016	WB	✓	✓
Aroclors	Aroclor 1221	WB	✓	✓
Aroclors	Aroclor 1232	WB	✓	✓
Aroclors	Aroclor 1242	WB	✓	✓
Aroclors	Aroclor 1248	WB	✓	✓
Aroclors	Aroclor 1260	WB		✓
PCB Congeners	PCB 169	WB	✓	
PCB Congeners	PCB 170	WB		✓
Pesticides	Aldrin	WB	✓	✓
Pesticides	Alpha-BHC	WB	✓	✓
Pesticides	Alpha-Chlordene	WB	✓	✓

Table F-12. Chemicals Not Detected in Pacific Lamprey

Chemical Group	Chemical	Sample Type	Site	
			21	24
Pesticides	Beta-BHC	WB	✓	✓
Pesticides	DDT-o,p'	WB	✓	
Pesticides	Delta-BHC	WB	✓	✓
Pesticides	Endosulfan Sulfate	WB	✓	✓
Pesticides	Gamma-Chlordene	WB	✓	✓
Pesticides	Heptachlor	WB	✓	✓
Pesticides	Heptachlor Epoxide	WB	✓	✓
Pesticides	Lindane	WB	✓	✓
Pesticides	Mirex	WB	✓	✓
Pesticides	Oxychlordane	WB	✓	
Pesticides	Toxaphene	WB	✓	✓
Pesticides	trans-Nonachlor	WB		✓
Semivolatiles	1,2,4-Trichlorobenzene	WB	✓	✓
Semivolatiles	1,2-Diphenylhydrazine	WB	✓	✓
Semivolatiles	2,4-Dinitrotoluene	WB	✓	✓
Semivolatiles	2,6-Dinitrotoluene	WB	✓	✓
Semivolatiles	2-Chloronaphthalene	WB	✓	✓
Semivolatiles	4-Bromophenyl-Phenylether	WB	✓	✓
Semivolatiles	4-Chlorophenyl-Phenylether	WB	✓	✓
Semivolatiles	Acenaphthene	WB	✓	✓
Semivolatiles	Acenaphthylene	WB	✓	✓
Semivolatiles	Anthracene	WB	✓	✓
Semivolatiles	Benzene, 1,2-dichloro-	WB	✓	✓
Semivolatiles	Benzene, 1,3-dichloro-	WB	✓	✓
Semivolatiles	Benzene, 1,4-dichloro-	WB	✓	✓
Semivolatiles	Benzo(a)anthracene	WB	✓	✓
Semivolatiles	Benzo(a)pyrene	WB	✓	✓
Semivolatiles	Benzo(g,h,i)perylene	WB	✓	✓
Semivolatiles	Benzo[b]Fluoranthene	WB	✓	✓
Semivolatiles	Benzo[k]fluoranthene	WB	✓	✓
Semivolatiles	bis(2-Chloroisopropyl)ether	WB	✓	✓
Semivolatiles	Chrysene	WB	✓	✓
Semivolatiles	Dibenz[a,h]anthracene	WB	✓	✓
Semivolatiles	Dibenzofuran	WB	✓	✓
Semivolatiles	Fluoranthene	WB	✓	
Semivolatiles	9H-Fluorene	WB	✓	✓
Semivolatiles	Hexachlorobutadiene	WB	✓	✓
Semivolatiles	Hexachloroethane	WB	✓	✓
Semivolatiles	Indeno(1,2,3-cd)pyrene	WB	✓	✓
Semivolatiles	Naphthalene	WB	✓	✓
Semivolatiles	Naphthalene, 1-methyl-	WB		✓
Semivolatiles	Naphthalene, 2-methyl-	WB		✓
Semivolatiles	Nitrobenzene	WB	✓	✓
Semivolatiles	Phenanthrene	WB		✓
Semivolatiles	Pyrene	WB	✓	✓
Semivolatiles	Retene	WB	✓	✓
Metals	Antimony	WB	✓	✓
Metals	Barium	WB	✓	✓
Metals	Beryllium	WB	✓	✓
Metals	Lead	WB	✓	
Metals	Selenium	WB		✓
Metals	Silver	WB	✓	
Metals	Thallium	WB	✓	✓

NOTE:

✓ - indicates that chemical was not detected for that species and sample type

na - chemical was not analyzed for that species and sample type

blank - indicates that chemical was detected for that species and sample type

FS - fillet with skin

Table F-12. Chemicals Not Detected in Pacific Lamprey

Chemical Group	Chemical	Sample Type	Site	
			21	24
WB - whole body				
Site 21 - located in the Willamette River				
Site 24 - located in Fifteen Mile Creek				

**COLUMBIA RIVER BASIN FISH
CONTAMINANT SURVEY**

**VOLUME I
Appendix G**

Non-cancer Hazard Quotients

January 2002

**Prepared by
U.S. Environmental Protection Agency
Region 10
Seattle, Washington**

**COLUMBIA RIVER BASIN FISH
CONTAMINANT SURVEY**

**VOLUME I
Appendix H**

Percent Contribution to Non-cancer

January 2002

**Prepared by
U.S. Environmental Protection Agency
Region 10
Seattle, Washington**

**COLUMBIA RIVER BASIN FISH
CONTAMINANT SURVEY**

**VOLUME I
Appendix I**

Cancer Risk Values

January 2002

**Prepared by
U.S. Environmental Protection Agency
Region 10
Seattle, Washington**

**COLUMBIA RIVER BASIN FISH
CONTAMINANT SURVEY**

**VOLUME I
Appendix J**

Percent Contribution to Cancer Risk Values

January 2002

**Prepared by
U.S. Environmental Protection Agency
Region 10
Seattle, Washington**

Appendix G1: Noncarcinogenic Risk Estimate for Adults
General Public and Native American Population

Anadromous Fish: Pacific lamprey
Fillet with skin, and whole body samples

Chemical Group	Chemical	Sample Type	Hazard Quotient				Site	Waterbody
			General Public		Native American			
			AFC	HFC	AFC	HFC		
Aroclors	Aroclor 1254	FS	0.47	8.8	3.9	24	21	Willamette River
Aroclors	Total aroclors	FS	0.47	8.8	3.9	24	21	Willamette River
Pesticides	Chlordane (total)	FS	0.0092	0.17	0.077	0.48	21	Willamette River
Pesticides	Total DDT	FS	0.020	0.38	0.17	1.0	21	Willamette River
Pesticides	Hexachlorobenzene	FS	0.0010	0.019	0.0086	0.053	21	Willamette River
Metals	Arsenic	FS	0.011	0.21	0.094	0.58	21	Willamette River
Metals	Cadmium	FS	0.0025	0.048	0.021	0.13	21	Willamette River
Metals	Chromium	FS	0.0029	0.054	0.024	0.15	21	Willamette River
Metals	Cobalt	FS	0.000059	0.0011	0.00050	0.0031	21	Willamette River
Metals	Copper	FS	0.0035	0.066	0.029	0.18	21	Willamette River
Metals	Manganese	FS	0.00029	0.0055	0.0024	0.015	21	Willamette River
Metals	Selenium	FS	0.0092	0.17	0.078	0.48	21	Willamette River
Metals	Vanadium	FS	0.00015	0.0028	0.0012	0.0077	21	Willamette River
Metals	Zinc	FS	0.0072	0.14	0.061	0.37	21	Willamette River
Aroclors	Aroclor 1254	WB	0.39	7.4	3.3	20	21	Willamette River
Aroclors	Aroclor 1254	WB	0.70	13	5.9	36	24	Fifteen Mile Ck
Aroclors	Total aroclors	WB	0.46	8.7	3.8	24	21	Willamette River
Aroclors	Total aroclors	WB	0.70	13	5.9	36	24	Fifteen Mile Ck
Pesticides	Chlordane (total)	WB	0.0044	0.084	0.037	0.23	21	Willamette River
Pesticides	Chlordane (total)	WB	0.012	0.22	0.099	0.61	24	Fifteen Mile Ck
Pesticides	Total DDT	WB	0.015	0.29	0.13	0.79	21	Willamette River
Pesticides	Total DDT	WB	0.026	0.50	0.22	1.4	24	Fifteen Mile Ck
Pesticides	Hexachlorobenzene	WB	0.00057	0.011	0.0048	0.030	21	Willamette River
Pesticides	Hexachlorobenzene	WB	0.0014	0.026	0.012	0.071	24	Fifteen Mile Ck
Semivolatiles	Fluoranthene	WB	0.000032	0.00060	0.00027	0.0016	24	Fifteen Mile Ck
Metals	Aluminum	WB	0.00014	0.0026	0.0011	0.0070	21	Willamette River
Metals	Aluminum	WB	0.00011	0.0022	0.00096	0.0059	24	Fifteen Mile Ck
Metals	Arsenic	WB	0.011	0.21	0.094	0.58	21	Willamette River
Metals	Arsenic	WB	0.0057	0.11	0.048	0.30	24	Fifteen Mile Ck
Metals	Cadmium	WB	0.015	0.28	0.12	0.76	21	Willamette River
Metals	Cadmium	WB	0.0070	0.13	0.059	0.36	24	Fifteen Mile Ck
Metals	Chromium	WB	0.0035	0.067	0.030	0.18	21	Willamette River
Metals	Chromium	WB	0.0038	0.072	0.032	0.20	24	Fifteen Mile Ck
Metals	Cobalt	WB	0.00019	0.0036	0.0016	0.0098	21	Willamette River
Metals	Cobalt	WB	0.00013	0.0025	0.0011	0.0069	24	Fifteen Mile Ck
Metals	Copper	WB	0.012	0.24	0.10	0.64	21	Willamette River
Metals	Copper	WB	0.014	0.27	0.12	0.75	24	Fifteen Mile Ck
Metals	Manganese	WB	0.00035	0.0066	0.0029	0.018	21	Willamette River
Metals	Manganese	WB	0.00019	0.0037	0.0016	0.010	24	Fifteen Mile Ck
Metals	Mercury	WB	0.092	1.8	0.78	4.8	21	Willamette River
Metals	Mercury	WB	0.19	3.6	1.6	9.8	24	Fifteen Mile Ck
Metals	Nickel	WB	0.000095	0.0018	0.00080	0.0049	21	Willamette River
Metals	Nickel	WB	0.0015	0.029	0.013	0.079	24	Fifteen Mile Ck
Metals	Selenium	WB	0.013	0.24	0.11	0.67	21	Willamette River
Metals	Selenium	WB	0.012	0.22	0.099	0.61	24	Fifteen Mile Ck
Metals	Vanadium	WB	0.00060	0.011	0.0050	0.031	21	Willamette River
Metals	Vanadium	WB	0.00066	0.013	0.0056	0.034	24	Fifteen Mile Ck
Metals	Zinc	WB	0.0077	0.15	0.065	0.40	21	Willamette River
Metals	Zinc	WB	0.0079	0.15	0.066	0.41	24	Fifteen Mile Ck

NOTE:

FS - fillet with skin AFC - average fish consumption
WB - whole body HFC - high fish consumption

Risk for General Public:

AFC - risk based on mean U.S. per capita consumption rate of uncooked freshwater and estuarine fish, 7.5 g/day (12 meals/yr) (USEPA 2000a)

HFC - risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish, 142.4 g/day (19 meals/mo) (USEPA 2000a)

Risk for Native American:

AFC - risk based on mean consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin, 63.2 g/day (2 meals/wk) (CRITFC 1994)

HFC - risk based on 99th percentile consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin, 389 g/day (12 meals/wk) (CRITFC 1994)

Chlordane (total) - sum of cis-chlordane, cis-nonachlor, gamma-chlordane, oxychlordane, and trans-nonachlor

Total Aroclors - based on Aroclor 1254 in FS and sum of Aroclors 1254 and 1260 in WB; risk calculated using RfD for Aroclor 1254

Appendix G1: Noncarcinogenic Risk Estimate for Adults
General Public and Native American Population

Anadromous Fish: Pacific lamprey
Fillet with skin, and whole body samples

Total DDT - sum of o,p' and p,p' isomers of DDT and its derivatives (DDD and DDE); risk calculated using RfD for DDT

Appendix G1: Noncarcinogenic Risk Estimate for Adults
General Public and Native American Population

Anadromous Fish: Pacific lamprey
Fillet with skin, and whole body samples

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**Appendix G2: Noncarcinogenic Risk Estimate for Children
General Public and Native American Population**

**Anadromous Fish: Pacific lamprey
Fillet with skin and whole body samples**

Chemical Group	Chemical	Sample Type	Hazard Quotient				Site	Waterbody
			General Public		Native American			
			AFC	HFC	AFC	HFC		
Aroclors	Aroclor 1254	FS	0.41	11	7.2	47	21	Willamette River
Aroclors	Total Aroclors	FS	0.41	11	7.2	47	21	Willamette River
Pesticides	Chlordane (total)	FS	0.0081	0.22	0.14	0.93	21	Willamette River
Pesticides	Total DDT	FS	0.018	0.49	0.31	2.0	21	Willamette River
Pesticides	Hexachlorobenzene	FS	0.00090	0.025	0.016	0.10	21	Willamette River
Metals	Arsenic	FS	0.0099	0.27	0.17	1.1	21	Willamette River
Metals	Cadmium	FS	0.0022	0.061	0.039	0.26	21	Willamette River
Metals	Chromium	FS	0.0025	0.069	0.044	0.29	21	Willamette River
Metals	Cobalt	FS	0.000052	0.0014	0.00091	0.0059	21	Willamette River
Metals	Copper	FS	0.0031	0.084	0.054	0.35	21	Willamette River
Metals	Manganese	FS	0.00026	0.0070	0.0045	0.029	21	Willamette River
Metals	Selenium	FS	0.0081	0.22	0.14	0.93	21	Willamette River
Metals	Vanadium	FS	0.00013	0.0036	0.0023	0.015	21	Willamette River
Metals	Zinc	FS	0.0064	0.18	0.11	0.73	21	Willamette River
Aroclors	Aroclor 1254	WB	0.35	9.5	6.1	40	21	Willamette River
Aroclors	Aroclor 1254	WB	0.61	17	11	70	24	Fifteen Mile Ck
Aroclors	Total Aroclors	WB	0.40	11	7.0	46	21	Willamette River
Aroclors	Total Aroclors	WB	0.61	17	11	70	24	Fifteen Mile Ck
Pesticides	Chlordane (total)	WB	0.0039	0.11	0.068	0.45	21	Willamette River
Pesticides	Chlordane (total)	WB	0.010	0.28	0.18	1.2	24	Fifteen Mile Ck
Pesticides	Total DDT	WB	0.013	0.37	0.24	1.5	21	Willamette River
Pesticides	Total DDT	WB	0.023	0.64	0.40	2.6	24	Fifteen Mile Ck
Pesticides	Hexachlorobenzene	WB	0.00050	0.014	0.0088	0.057	21	Willamette River
Pesticides	Hexachlorobenzene	WB	0.0012	0.033	0.021	0.14	24	Fifteen Mile Ck
Semivolatiles	Fluoranthene	WB	0.000028	0.00077	0.00049	0.0032	24	Fifteen Mile Ck
Metals	Aluminum	WB	0.00012	0.0033	0.0021	0.014	21	Willamette River
Metals	Aluminum	WB	0.00010	0.0028	0.0018	0.012	24	Fifteen Mile Ck
Metals	Arsenic	WB	0.0098	0.27	0.17	1.1	21	Willamette River
Metals	Arsenic	WB	0.0050	0.14	0.088	0.58	24	Fifteen Mile Ck
Metals	Cadmium	WB	0.013	0.35	0.23	1.5	21	Willamette River
Metals	Cadmium	WB	0.0062	0.17	0.11	0.71	24	Fifteen Mile Ck
Metals	Chromium	WB	0.0031	0.085	0.054	0.35	21	Willamette River
Metals	Chromium	WB	0.0034	0.092	0.059	0.38	24	Fifteen Mile Ck
Metals	Cobalt	WB	0.00017	0.0046	0.0029	0.019	21	Willamette River
Metals	Cobalt	WB	0.00012	0.0032	0.0021	0.014	24	Fifteen Mile Ck
Metals	Copper	WB	0.011	0.30	0.19	1.3	21	Willamette River
Metals	Copper	WB	0.013	0.35	0.22	1.5	24	Fifteen Mile Ck
Metals	Manganese	WB	0.00031	0.0085	0.0054	0.035	21	Willamette River
Metals	Manganese	WB	0.00017	0.0047	0.0030	0.020	24	Fifteen Mile Ck
Metals	Mercury	WB	0.081	2.2	1.4	9.3	21	Willamette River
Metals	Mercury	WB	0.17	4.6	2.9	19	24	Fifteen Mile Ck
Metals	Nickel	WB	0.000083	0.0023	0.0015	0.0095	21	Willamette River
Metals	Nickel	WB	0.0013	0.037	0.023	0.15	24	Fifteen Mile Ck
Metals	Selenium	WB	0.011	0.31	0.20	1.3	21	Willamette River
Metals	Selenium	WB	0.010	0.29	0.18	1.2	24	Fifteen Mile Ck
Metals	Vanadium	WB	0.00053	0.014	0.0092	0.060	21	Willamette River
Metals	Vanadium	WB	0.00058	0.016	0.010	0.067	24	Fifteen Mile Ck
Metals	Zinc	WB	0.0067	0.19	0.12	0.77	21	Willamette River
Metals	Zinc	WB	0.0069	0.19	0.12	0.79	24	Fifteen Mile Ck

NOTE:

FS - fillet with skin AFC - average fish consumption
WB - whole body HFC - high fish consumption

Risk for General Public:

AFC - risk based on mean U.S. per capita consumption rate of uncooked freshwater and estuarine fish, 2.83 g/day (5 meals/yr) (USEPA 2000a)

HFC - risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish, 77.95 g/day (11 meals/yr) (USEPA 2000a)

Risk for Native American:

AFC - risk based on mean consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin, 24.8 g/day (40 meals/yr) (CRITFC 1994)

HFC - risk based on 99th percentile consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin, 162 g/day (5 meals/wk) (CRITFC 1994)

Chlordane (total) - sum of cis-chlordane, cis-nonachlor, gamma-chlordane, oxychlordane, and trans-nonachlor

Total Aroclors - based on Aroclor 1254 in FS and sum of Aroclors 1254 and 1260 in WB; risk calculated using RfD for Aroclor 1254

Appendix G2: Noncarcinogenic Risk Estimate for Children
General Public and Native American Population

Anadromous Fish: Pacific lamprey
Fillet with skin and whole body samples

Total DDT - sum of o,p' and p,p' isomers of DDT and its derivatives (DDD and DDE); risk calculated using RfD for DDT

**Appendix H1: Percent Contribution of
Detected Noncarcinogenic Chemicals
to Total Hazard Index**

**Anadromous Fish: Pacific lamprey
Fillet with skin and whole body samples**

Chemical Group	Chemical	Sample Type	Percent Contribution	Site	Waterbody
Aroclors	Total Aroclors	FS	87	21	Willamette River
Pesticides	Chlordane (total)	FS	1.7	21	Willamette River
Pesticides	Total DDT	FS	3.8	21	Willamette River
Pesticides	Hexachlorobenzene	FS	0.19	21	Willamette River
Metals	Arsenic	FS	2.1	21	Willamette River
Metals	Cadmium	FS	0.48	21	Willamette River
Metals	Chromium	FS	0.54	21	Willamette River
Metals	Cobalt	FS	0.011	21	Willamette River
Metals	Copper	FS	0.65	21	Willamette River
Metals	Manganese	FS	0.054	21	Willamette River
Metals	Selenium	FS	1.7	21	Willamette River
Metals	Vanadium	FS	0.028	21	Willamette River
Metals	Zinc	FS	1.4	21	Willamette River
Aroclors	Total Aroclors	WB	72	21	Willamette River
Aroclors	Total Aroclors	WB	71	24	Fifteen Mile Ck
Pesticides	Chlordane (total)	WB	0.70	21	Willamette River
Pesticides	Chlordane (total)	WB	1.2	24	Fifteen Mile Ck
Pesticides	Total DDT	WB	2.4	21	Willamette River
Pesticides	Total DDT	WB	2.7	24	Fifteen Mile Ck
Pesticides	Hexachlorobenzene	WB	0.090	21	Willamette River
Pesticides	Hexachlorobenzene	WB	0.14	24	Fifteen Mile Ck
Semivolatiles	Fluoranthene	WB	0.0032	24	Fifteen Mile Ck
Metals	Aluminum	WB	0.022	21	Willamette River
Metals	Aluminum	WB	0.012	24	Fifteen Mile Ck
Metals	Arsenic	WB	1.8	21	Willamette River
Metals	Arsenic	WB	0.59	24	Fifteen Mile Ck
Metals	Cadmium	WB	2.3	21	Willamette River
Metals	Cadmium	WB	0.72	24	Fifteen Mile Ck
Metals	Chromium	WB	0.56	21	Willamette River
Metals	Chromium	WB	0.39	24	Fifteen Mile Ck
Metals	Cobalt	WB	0.030	21	Willamette River
Metals	Cobalt	WB	0.014	24	Fifteen Mile Ck
Metals	Copper	WB	2.0	21	Willamette River
Metals	Copper	WB	1.5	24	Fifteen Mile Ck
Metals	Manganese	WB	0.055	21	Willamette River
Metals	Manganese	WB	0.020	24	Fifteen Mile Ck
Metals	Mercury	WB	15	21	Willamette River
Metals	Mercury	WB	19	24	Fifteen Mile Ck
Metals	Nickel	WB	0.015	21	Willamette River
Metals	Nickel	WB	0.16	24	Fifteen Mile Ck
Metals	Selenium	WB	2.0	21	Willamette River
Metals	Selenium	WB	1.2	24	Fifteen Mile Ck
Metals	Vanadium	WB	0.094	21	Willamette River
Metals	Vanadium	WB	0.068	24	Fifteen Mile Ck
Metals	Zinc	WB	1.2	21	Willamette River
Metals	Zinc	WB	0.81	24	Fifteen Mile Ck

NOTE:

FS - fillet with skin

WB - whole body

Chlordane (total) - sum of cis-chlordane, cis-nonachlor, gamma-chlordane, oxychlordane, and trans-nonachlor

Total Aroclors - based on Aroclor 1254 in FS and sum of Aroclors 1254 and 1260 in WB; risk calculated using RfD for Aroclor 1254

Total DDT - sum of o,p' and p,p' isomers of DDT and its derivatives (DDD and DDE); risk calculated using RfD for DDT

**Appendix H2: Percent Contribution of
Detected Noncarcinogenic Chemicals
to Health Endpoint**

**Anadromous Fish: Pacific lamprey
Whole body samples**

			Percent Contribution	
			Site	
Sample Type	Endpoint	Chemical	21	24
FS	Liver	Aldrin		
FS	Liver	Chlordane (total)	23.3	23.0
FS	Liver	Total DDT	50.8	51.3
FS	Liver	Hexachlorobenzene	2.6	2.7
FS	Liver	Heptachlor		
FS	Liver	Heptachlor Epoxide		
FS	Liver	Lindane		
FS	Liver	Thallium		
FS	Liver	Mirex		
FS	Liver	2,4,5-Trichlorophenol		
FS	Liver	Pentachlorophenol		
FS	Liver	Acenaphthene		
FS	Liver	Fluoranthene		0.1
FS	Liver	2-Chloronaphthalene		
FS	Liver	2,4-Dinitrotoluene		
FS	Liver	2,6-Dinitrotoluene		
FS	Liver	Selenium	23.4	23.0
FS	Liver	Nitrobenzene		
FS	Adrenal gland	Nitrobenzene		
FS	Adrenal gland	1,2,4-Trichlorobenzene		
FS	Kidney	Endosulfan Sulfate		
FS	Kidney	Lindane		
FS	Kidney	2,4,5-Trichlorophenol		
FS	Kidney	Pentachlorophenol		
FS	Kidney	2,6-Dinitrotoluene		
FS	Kidney	Hexachloroethane		
FS	Kidney	Nitrobenzene		
FS	Kidney	Fluoranthene		0.4
FS	Kidney	Pyrene		
FS	Kidney	Cadmium	100	99.6
FS	Blood formation	2,4-Dimethylphenol		
FS	Blood formation	bis(2-Chloroisopropyl)ether		
FS	Blood formation	Nitrobenzene		
FS	Blood formation	2,4-Dinitrotoluene		
FS	Blood formation	2,6-Dinitrotoluene		
FS	Blood formation	9H-Fluorene		
FS	Blood formation	Fluoranthene		100
FS	Cardiovascular	Arsenic	100	100
FS	Cardiovascular	Endosulfan Sulfate		
FS	Central Nervous System	Manganese	100	0.1
FS	Central Nervous System	Mercury		99.9
FS	Central Nervous System	2,4-Dinitrotoluene		
FS	Central Nervous System	2,6-Dinitrotoluene		
FS	Immune System	2,4-Dichlorophenol		
FS	Immune System	Total Aroclors	100	100
FS	Metabolism	Naphthalene		
FS	Metabolism	Antimony		
FS	Metabolism	Nickel		16.2
FS	Metabolism	Zinc	100	83.8
FS	Reproduction and development	Phenol		
FS	Reproduction and development	2-Chlorophenol		
FS	Reproduction and development	Mercury		100
WB	Liver	Aldrin		na
WB	Liver	Chlordane (total)	13.3	na
WB	Liver	Total DDT	46.2	na
WB	Liver	Hexachlorobenzene	1.7	na
WB	Liver	Heptachlor		na
WB	Liver	Heptachlor Epoxide		na
WB	Liver			na
WB	Liver	Mirex		na
WB	Liver	Thallium		na
WB	Liver	2,4,5-Trichlorophenol		na
WB	Liver	Pentachlorophenol		na
WB	Liver	Acenaphthene		na
WB	Liver	Fluoranthene		na
WB	Liver	2-Chloronaphthalene		na
WB	Liver	2,4-Dinitrotoluene		na
WB	Liver	2,6-Dinitrotoluene		na
WB	Liver	Selenium	38.8	na
WB	Liver	Nitrobenzene		na

**Appendix H2: Percent Contribution of
Detected Noncarcinogenic Chemicals
to Health Endpoint**

**Anadromous Fish: Pacific lamprey
Whole body samples**

Sample			Percent Contribution	
			Site	
Type	Endpoint	Chemical	21	24
WB	Adrenal gland	Nitrobenzene		na
WB	Adrenal gland	1,2,4-Trichlorobenzene		na
WB	Kidney	Endosulfan Sulfate		na
WB	Kidney	Lindane		na
WB	Kidney	2,4,5-Trichlorophenol		na
WB	Kidney	Pentachlorophenol		na
WB	Kidney	2,6-Dinitrotoluene		na
WB	Kidney	Hexachloroethane		na
WB	Kidney	Nitrobenzene		na
WB	Kidney	Fluoranthene		na
WB	Kidney	Pyrene		na
WB	Kidney	Cadmium	100	na
WB	Blood formation	2,4-Dimethylphenol		na
WB	Blood formation	bis(2-Chloroisopropyl)ether		na
WB	Blood formation	Nitrobenzene		na
WB	Blood formation	2,4-Dinitrotoluene		na
WB	Blood formation	2,6-Dinitrotoluene		na
WB	Blood formation	9H-Fluorene		na
WB	Blood formation	Fluoranthene		na
WB	Cardiovascular	Arsenic	100	na
WB	Cardiovascular	Endosulfan Sulfate		na
WB	Central Nervous System	Manganese	0.4	na
WB	Central Nervous System	Mercury	99.6	na
WB	Central Nervous System	2,4-Dinitrotoluene		na
WB	Central Nervous System	2,6-Dinitrotoluene		na
WB	Immune System	2,4-Dichlorophenol		na
WB	Immune System	Total Aroclors	100	na
WB	Metabolism	Naphthalene		na
WB	Metabolism	Antimony		na
WB	Metabolism	Nickel	1.2	na
WB	Metabolism	Zinc	98.8	na
WB	Reproduction and development	Phenol		na
WB	Reproduction and development	2-Chlorophenol		na
WB	Reproduction and development	Mercury	100	na

NOTE:

Health endpoints with only one contributing chemical are not shown: gastrointestinal or intestinal lesions (beryllium), argyria (silver), thyroid (mirex), clinical signs (2,4-Dimethylphenol), selenosis (selenium), and hyperpigmentation/keratosis (arsenic).

Blank cell indicates that chemical was not detected.

na - sample type was not analyzed at that site

FS - fillet with skin

WB - whole body

Chlordane (total) - sum of cis-chlordane, cis-nonachlor, gamma-chlordane, oxychlordane, and trans-nonachlor

Total Aroclors - sum of Aroclors: 1254 in FS and at Site 24 in WB, 1254 and 1260 at Site 21 in WB; risk calculated using RfD for Aroclor 1254

Total DDT - sum of o,p' and p,p' isomers of DDT and its derivatives (DDD and DDE); risk calculated using RfD for DDT

Site 21 - located in the Willamette River

Site 24 - located in the Fifteen Mile Creek

Appendix I1: Carcinogenic Risk Estimate
for General Public and Native American Populations:
30-year exposure

Anadromous Fish: Pacific lamprey
Whole body samples

Chemical Group	Chemical	Sample Type	Excess Cancer Risk				Site	Waterbody
			General Public		Native American			
			AFC	HFC	AFC	HFC		
Dioxin/furans	2,3,7,8-TCDD	FS	2E-07	4E-06	2E-06	1E-05	21	Willamette River
Dioxin/furans	1,2,3,7,8-PeCDD	FS	8E-07	1E-05	6E-06	4E-05	21	Willamette River
Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	5E-08	1E-06	5E-07	3E-06	21	Willamette River
Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	1E-07	2E-06	1E-06	7E-06	21	Willamette River
Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	3E-08	6E-07	3E-07	2E-06	21	Willamette River
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	1E-08	3E-07	1E-07	7E-07	21	Willamette River
Dioxin/furans	OCDD	FS	3E-10	5E-09	2E-09	1E-08	21	Willamette River
Dioxin/furans	2,3,7,8-TCDF	FS	1E-06	2E-05	9E-06	5E-05	21	Willamette River
Dioxin/furans	1,2,3,7,8-PeCDF	FS	4E-08	8E-07	4E-07	2E-06	21	Willamette River
Dioxin/furans	2,3,4,7,8-PeCDF	FS	4E-07	8E-06	3E-06	2E-05	21	Willamette River
Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	6E-08	1E-06	5E-07	3E-06	21	Willamette River
Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	6E-08	1E-06	5E-07	3E-06	21	Willamette River
Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	3E-08	6E-07	3E-07	2E-06	21	Willamette River
Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	1E-07	2E-06	1E-06	6E-06	21	Willamette River
Aroclors	Aroclor 1254	FS	8E-06	2E-04	7E-05	4E-04	21	Willamette River
Aroclors	Adjusted Aroclors	FS	7E-06	1E-04	6E-05	4E-04	21	Willamette River
PCB Congeners	PCB 77	FS	2E-08	3E-07	1E-07	9E-07	21	Willamette River
PCB Congeners	PCB 105	FS	9E-07	2E-05	7E-06	5E-05	21	Willamette River
PCB Congeners	PCB 114	FS	5E-07	9E-06	4E-06	3E-05	21	Willamette River
PCB Congeners	PCB 118	FS	3E-06	5E-05	2E-05	1E-04	21	Willamette River
PCB Congeners	PCB 123	FS	4E-08	8E-07	4E-07	2E-06	21	Willamette River
PCB Congeners	PCB 126	FS	1E-05	2E-04	9E-05	6E-04	21	Willamette River
PCB Congeners	PCB 156	FS	1E-06	2E-05	8E-06	5E-05	21	Willamette River
PCB Congeners	PCB 157	FS	2E-07	3E-06	2E-06	9E-06	21	Willamette River
PCB Congeners	PCB 167	FS	1E-08	2E-07	1E-07	6E-07	21	Willamette River
PCB Congeners	PCB 189	FS	1E-08	3E-07	1E-07	7E-07	21	Willamette River
Pesticides	Chlordane (total)	FS	7E-07	1E-05	6E-06	4E-05	21	Willamette River
Pesticides	DDD	FS	8E-08	2E-06	7E-07	4E-06	21	Willamette River
Pesticides	DDE	FS	9E-07	2E-05	7E-06	4E-05	21	Willamette River
Pesticides	DDT	FS	5E-07	9E-06	4E-06	3E-05	21	Willamette River
Pesticides	Hexachlorobenzene	FS	6E-07	1E-05	5E-06	3E-05	21	Willamette River
Metals	Arsenic	FS	2E-06	4E-05	2E-05	1E-04	21	Willamette River
Dioxin/furans	2,3,7,8-TCDD	WB	2E-07	4E-06	2E-06	1E-05	21	Willamette River
Dioxin/furans	2,3,7,8-TCDD	WB	2E-07	4E-06	2E-06	1E-05	24	Fifteen Mile Creek
Dioxin/furans	1,2,3,7,8-PeCDD	WB	8E-07	1E-05	7E-06	4E-05	21	Willamette River
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	5E-08	9E-07	4E-07	2E-06	21	Willamette River
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	8E-08	2E-06	7E-07	4E-06	21	Willamette River
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	2E-07	3E-06	1E-06	8E-06	24	Fifteen Mile Creek
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	3E-08	5E-07	2E-07	1E-06	21	Willamette River
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	2E-08	4E-07	2E-07	1E-06	24	Fifteen Mile Creek
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	2E-08	3E-07	1E-07	9E-07	21	Willamette River
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	2E-08	3E-07	2E-07	1E-06	24	Fifteen Mile Creek
Dioxin/furans	OCDD	WB	2E-10	4E-09	2E-09	1E-08	21	Willamette River
Dioxin/furans	OCDD	WB	5E-10	1E-08	4E-09	3E-08	24	Fifteen Mile Creek
Dioxin/furans	2,3,7,8-TCDF	WB	1E-06	2E-05	9E-06	6E-05	21	Willamette River
Dioxin/furans	2,3,7,8-TCDF	WB	2E-06	4E-05	2E-05	1E-04	24	Fifteen Mile Creek
Dioxin/furans	1,2,3,7,8-PeCDF	WB	9E-08	2E-06	8E-07	5E-06	21	Willamette River
Dioxin/furans	1,2,3,7,8-PeCDF	WB	2E-07	3E-06	1E-06	8E-06	24	Fifteen Mile Creek
Dioxin/furans	2,3,4,7,8-PeCDF	WB	3E-07	6E-06	3E-06	2E-05	21	Willamette River
Dioxin/furans	2,3,4,7,8-PeCDF	WB	3E-07	6E-06	3E-06	2E-05	24	Fifteen Mile Creek
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	6E-08	1E-06	5E-07	3E-06	21	Willamette River
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	1E-07	2E-06	1E-06	6E-06	24	Fifteen Mile Creek
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	5E-08	1E-06	4E-07	3E-06	21	Willamette River
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	1E-07	2E-06	9E-07	6E-06	24	Fifteen Mile Creek
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	3E-08	6E-07	3E-07	2E-06	21	Willamette River
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	7E-08	1E-06	6E-07	4E-06	21	Willamette River
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	8E-08	2E-06	7E-07	4E-06	24	Fifteen Mile Creek
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	3E-09	6E-08	2E-08	2E-07	21	Willamette River
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	6E-09	1E-07	5E-08	3E-07	24	Fifteen Mile Creek
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	1E-09	2E-08	1E-08	6E-08	21	Willamette River

Appendix I1: Carcinogenic Risk Estimate
for General Public and Native American Populations:
30-year exposure

Anadromous Fish: Pacific lamprey
Whole body samples

Chemical Group	Chemical	Sample Type	Excess Cancer Risk				Site	Waterbody
			General Public		Native American			
			AFC	HFC	AFC	HFC		
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	1E-09	2E-08	9E-09	6E-08	24	Fifteen Mile Creek
Dioxin/furans	OCDF	WB	2E-11	4E-10	2E-10	1E-09	21	Willamette River
Dioxin/furans	OCDF	WB	6E-11	1E-09	5E-10	3E-09	24	Fifteen Mile Creek
Aroclors	Aroclor 1254	WB	7E-06	1E-04	6E-05	3E-04	21	Willamette River
Aroclors	Aroclor 1254	WB	1E-05	2E-04	1E-04	6E-04	24	Fifteen Mile Creek
Aroclors	Aroclor 1260	WB	1E-06	2E-05	9E-06	6E-05	21	Willamette River
Aroclors	Adjusted Aroclors	WB	7E-06	1E-04	6E-05	4E-04	21	Willamette River
Aroclors	Adjusted Aroclors	WB	1E-05	2E-04	9E-05	6E-04	24	Fifteen Mile Creek
PCB Congeners	PCB 77	WB	2E-08	3E-07	1E-07	9E-07	21	Willamette River
PCB Congeners	PCB 77	WB	2E-08	5E-07	2E-07	1E-06	24	Fifteen Mile Creek
PCB Congeners	PCB 105	WB	7E-07	1E-05	6E-06	3E-05	21	Willamette River
PCB Congeners	PCB 105	WB	1E-06	2E-05	1E-05	6E-05	24	Fifteen Mile Creek
PCB Congeners	PCB 114	WB	4E-07	8E-06	4E-06	2E-05	21	Willamette River
PCB Congeners	PCB 114	WB	6E-07	1E-05	5E-06	3E-05	24	Fifteen Mile Creek
PCB Congeners	PCB 118	WB	2E-06	4E-05	2E-05	1E-04	21	Willamette River
PCB Congeners	PCB 118	WB	4E-06	7E-05	3E-05	2E-04	24	Fifteen Mile Creek
PCB Congeners	PCB 123	WB	3E-08	5E-07	2E-07	1E-06	21	Willamette River
PCB Congeners	PCB 123	WB	5E-08	9E-07	4E-07	2E-06	24	Fifteen Mile Creek
PCB Congeners	PCB 126	WB	1E-05	3E-04	1E-04	8E-04	21	Willamette River
PCB Congeners	PCB 126	WB	2E-05	3E-04	2E-04	9E-04	24	Fifteen Mile Creek
PCB Congeners	PCB 156	WB	1E-06	2E-05	8E-06	5E-05	21	Willamette River
PCB Congeners	PCB 156	WB	1E-06	3E-05	1E-05	8E-05	24	Fifteen Mile Creek
PCB Congeners	PCB 157	WB	8E-08	1E-06	6E-07	4E-06	21	Willamette River
PCB Congeners	PCB 157	WB	3E-07	5E-06	2E-06	1E-05	24	Fifteen Mile Creek
PCB Congeners	PCB 167	WB	1E-08	2E-07	1E-07	6E-07	21	Willamette River
PCB Congeners	PCB 167	WB	2E-08	3E-07	1E-07	9E-07	24	Fifteen Mile Creek
PCB Congeners	PCB 189	WB	1E-08	2E-07	1E-07	7E-07	21	Willamette River
PCB Congeners	PCB 189	WB	2E-08	4E-07	2E-07	1E-06	24	Fifteen Mile Creek
Pesticides	Chlordane (total)	WB	3E-07	6E-06	3E-06	2E-05	21	Willamette River
Pesticides	Chlordane (total)	WB	9E-07	2E-05	7E-06	5E-05	24	Fifteen Mile Creek
Pesticides	DDD	WB	9E-08	2E-06	8E-07	5E-06	21	Willamette River
Pesticides	DDD	WB	3E-07	6E-06	3E-06	2E-05	24	Fifteen Mile Creek
Pesticides	DDE	WB	7E-07	1E-05	6E-06	4E-05	21	Willamette River
Pesticides	DDE	WB	1E-06	2E-05	1E-05	6E-05	24	Fifteen Mile Creek
Pesticides	DDT	WB	2E-07	5E-06	2E-06	1E-05	21	Willamette River
Pesticides	DDT	WB	3E-07	5E-06	2E-06	1E-05	24	Fifteen Mile Creek
Pesticides	Hexachlorobenzene	WB	3E-07	6E-06	3E-06	2E-05	21	Willamette River
Pesticides	Hexachlorobenzene	WB	8E-07	1E-05	6E-06	4E-05	24	Fifteen Mile Creek
Metals	Arsenic	WB	2E-06	4E-05	2E-05	1E-04	21	Willamette River
Metals	Arsenic	WB	1E-06	2E-05	9E-06	6E-05	24	Fifteen Mile Creek

NOTE:

FS - fillet with skin

WB - whole body

Risk estimates for detected chemicals only

Risk for General Public:

AFC - risk based on mean U.S. per capita consumption rate of uncooked freshwater and estuarine fish, 7.5 g/day (12 meals/yr) (USEPA 2000a)

HFC - risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish, 142.4 g/day (19 meals/mo) (USEPA 2000a)

Risk for Native American:

AFC - risk based on mean consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin, 63.2 g/day (2 meals/wk) (CRITFC 1994)

HFC - risk based on 99th percentile consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River 389 g/day (12 meals/wk) (CRITFC 1994)

Chlordane (total) - sum of cis-chlordane, cis-nonachlor, gamma-chlordane, oxychlordane, and trans-nonachlor

Adjusted Aroclors - risk associated with non-dioxin-like PCB congeners

Appendix I2: Carcinogenic Risk Estimate
for General Public and Native American Populations:
70-year exposure

Anadromous Fish: Pacific lamprey
Whole body samples

Chemical Group	Chemical	Sample Type	Excess Cancer Risk				Site	Waterbody
			General Population		Native American			
			AFC	HFC	AFC	HFC		
Dioxin/furans	2,3,7,8-TCDD	FS	4E-07	8E-06	4E-06	2E-05	21	Willamette River
Dioxin/furans	1,2,3,7,8-PeCDD	FS	2E-06	3E-05	2E-05	9E-05	21	Willamette River
Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	1E-07	2E-06	1E-06	7E-06	21	Willamette River
Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	3E-07	6E-06	3E-06	2E-05	21	Willamette River
Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	8E-08	1E-06	7E-07	4E-06	21	Willamette River
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	3E-08	6E-07	3E-07	2E-06	21	Willamette River
Dioxin/furans	OCDD	FS	6E-10	1E-08	5E-09	3E-08	21	Willamette River
Dioxin/furans	2,3,7,8-TCDF	FS	2E-06	4E-05	2E-05	1E-04	21	Willamette River
Dioxin/furans	1,2,3,7,8-PeCDF	FS	1E-07	2E-06	8E-07	5E-06	21	Willamette River
Dioxin/furans	2,3,4,7,8-PeCDF	FS	9E-07	2E-05	8E-06	5E-05	21	Willamette River
Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	1E-07	3E-06	1E-06	7E-06	21	Willamette River
Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	1E-07	3E-06	1E-06	8E-06	21	Willamette River
Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	7E-08	1E-06	6E-07	4E-06	21	Willamette River
Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	3E-07	5E-06	2E-06	1E-05	21	Willamette River
Aroclors	Aroclor 1254	FS	2E-05	4E-04	2E-04	1E-03	21	Willamette River
Aroclors	Adjusted Aroclors	FS	2E-05	3E-04	1E-04	9E-04	21	Willamette River
PCB Congeners	PCB 77	FS	4E-08	7E-07	3E-07	2E-06	21	Willamette River
PCB Congeners	PCB 105	FS	2E-06	4E-05	2E-05	1E-04	21	Willamette River
PCB Congeners	PCB 114	FS	1E-06	2E-05	1E-05	6E-05	21	Willamette River
PCB Congeners	PCB 118	FS	6E-06	1E-04	5E-05	3E-04	21	Willamette River
PCB Congeners	PCB 123	FS	1E-07	2E-06	8E-07	5E-06	21	Willamette River
PCB Congeners	PCB 126	FS	3E-05	5E-04	2E-04	1E-03	21	Willamette River
PCB Congeners	PCB 156	FS	2E-06	4E-05	2E-05	1E-04	21	Willamette River
PCB Congeners	PCB 157	FS	4E-07	8E-06	4E-06	2E-05	21	Willamette River
PCB Congeners	PCB 167	FS	3E-08	5E-07	2E-07	1E-06	21	Willamette River
PCB Congeners	PCB 189	FS	3E-08	6E-07	3E-07	2E-06	21	Willamette River
Pesticides	Chlordane (total)	FS	2E-06	3E-05	1E-05	8E-05	21	Willamette River
Pesticides	DDD	FS	2E-07	4E-06	2E-06	1E-05	21	Willamette River
Pesticides	DDE	FS	2E-06	4E-05	2E-05	1E-04	21	Willamette River
Pesticides	DDT	FS	1E-06	2E-05	1E-05	6E-05	21	Willamette River
Pesticides	Hexachlorobenzene	FS	1E-06	2E-05	1E-05	7E-05	21	Willamette River
Metals	Arsenic	FS	5E-06	1E-04	4E-05	3E-04	21	Willamette River
Dioxin/furans	2,3,7,8-TCDD	WB	5E-07	9E-06	4E-06	2E-05	21	Willamette River
Dioxin/furans	2,3,7,8-TCDD	WB	5E-07	1E-05	4E-06	3E-05	24	Fifteen Mile Creek
Dioxin/furans	1,2,3,7,8-PeCDD	WB	2E-06	3E-05	2E-05	9E-05	21	Willamette River
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	1E-07	2E-06	9E-07	6E-06	21	Willamette River
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	2E-07	4E-06	2E-06	1E-05	21	Willamette River
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	4E-07	7E-06	3E-06	2E-05	24	Fifteen Mile Creek
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	6E-08	1E-06	5E-07	3E-06	21	Willamette River
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	5E-08	1E-06	4E-07	3E-06	24	Fifteen Mile Creek
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	4E-08	7E-07	3E-07	2E-06	21	Willamette River
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	4E-08	8E-07	4E-07	2E-06	24	Fifteen Mile Creek
Dioxin/furans	OCDD	WB	5E-10	9E-09	4E-09	3E-08	21	Willamette River
Dioxin/furans	OCDD	WB	1E-09	2E-08	1E-08	6E-08	24	Fifteen Mile Creek
Dioxin/furans	2,3,7,8-TCDF	WB	2E-06	5E-05	2E-05	1E-04	21	Willamette River
Dioxin/furans	2,3,7,8-TCDF	WB	5E-06	1E-04	4E-05	3E-04	24	Fifteen Mile Creek
Dioxin/furans	1,2,3,7,8-PeCDF	WB	2E-07	4E-06	2E-06	1E-05	21	Willamette River
Dioxin/furans	1,2,3,7,8-PeCDF	WB	4E-07	7E-06	3E-06	2E-05	24	Fifteen Mile Creek
Dioxin/furans	2,3,4,7,8-PeCDF	WB	7E-07	1E-05	6E-06	4E-05	21	Willamette River
Dioxin/furans	2,3,4,7,8-PeCDF	WB	7E-07	1E-05	6E-06	4E-05	24	Fifteen Mile Creek
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	1E-07	3E-06	1E-06	7E-06	21	Willamette River
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	3E-07	5E-06	2E-06	1E-05	24	Fifteen Mile Creek
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	1E-07	2E-06	1E-06	6E-06	21	Willamette River
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	3E-07	5E-06	2E-06	1E-05	24	Fifteen Mile Creek
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	7E-08	1E-06	6E-07	4E-06	21	Willamette River
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	2E-07	3E-06	1E-06	8E-06	21	Willamette River
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	2E-07	4E-06	2E-06	1E-05	24	Fifteen Mile Creek
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	7E-09	1E-07	6E-08	4E-07	21	Willamette River
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	1E-08	3E-07	1E-07	8E-07	24	Fifteen Mile Creek
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3E-09	5E-08	2E-08	1E-07	21	Willamette River

Appendix I2: Carcinogenic Risk Estimate
for General Public and Native American Populations:
70-year exposure

Anadromous Fish: Pacific lamprey
Whole body samples

Chemical Group	Chemical	Sample Type	Excess Cancer Risk				Site	Waterbody
			General Population		Native American			
			AFC	HFC	AFC	HFC		
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	3E-09	5E-08	2E-08	1E-07	24	Fifteen Mile Creek
Dioxin/furans	OCDF	WB	5E-11	9E-10	4E-10	2E-09	21	Willamette River
Dioxin/furans	OCDF	WB	1E-10	3E-09	1E-09	7E-09	24	Fifteen Mile Creek
Aroclors	Aroclor 1254	WB	2E-05	3E-04	1E-04	8E-04	21	Willamette River
Aroclors	Aroclor 1254	WB	3E-05	5E-04	2E-04	1E-03	24	Fifteen Mile Creek
Aroclors	Aroclor 1260	WB	3E-06	5E-05	2E-05	1E-04	21	Willamette River
Aroclors	Adjusted Aroclors	WB	2E-05	3E-04	1E-04	9E-04	21	Willamette River
Aroclors	Adjusted Aroclors	WB	3E-05	5E-04	2E-04	1E-03	24	Fifteen Mile Creek
PCB Congeners	PCB 77	WB	4E-08	8E-07	3E-07	2E-06	21	Willamette River
PCB Congeners	PCB 77	WB	6E-08	1E-06	5E-07	3E-06	24	Fifteen Mile Creek
PCB Congeners	PCB 105	WB	2E-06	3E-05	1E-05	8E-05	21	Willamette River
PCB Congeners	PCB 105	WB	3E-06	6E-05	2E-05	2E-04	24	Fifteen Mile Creek
PCB Congeners	PCB 114	WB	1E-06	2E-05	9E-06	5E-05	21	Willamette River
PCB Congeners	PCB 114	WB	2E-06	3E-05	1E-05	8E-05	24	Fifteen Mile Creek
PCB Congeners	PCB 118	WB	5E-06	9E-05	4E-05	2E-04	21	Willamette River
PCB Congeners	PCB 118	WB	8E-06	2E-04	7E-05	4E-04	24	Fifteen Mile Creek
PCB Congeners	PCB 123	WB	7E-08	1E-06	6E-07	3E-06	21	Willamette River
PCB Congeners	PCB 123	WB	1E-07	2E-06	9E-07	6E-06	24	Fifteen Mile Creek
PCB Congeners	PCB 126	WB	3E-05	6E-04	3E-04	2E-03	21	Willamette River
PCB Congeners	PCB 126	WB	4E-05	8E-04	4E-04	2E-03	24	Fifteen Mile Creek
PCB Congeners	PCB 156	WB	2E-06	4E-05	2E-05	1E-04	21	Willamette River
PCB Congeners	PCB 156	WB	3E-06	7E-05	3E-05	2E-04	24	Fifteen Mile Creek
PCB Congeners	PCB 157	WB	2E-07	3E-06	1E-06	9E-06	21	Willamette River
PCB Congeners	PCB 157	WB	7E-07	1E-05	6E-06	3E-05	24	Fifteen Mile Creek
PCB Congeners	PCB 167	WB	3E-08	5E-07	2E-07	1E-06	21	Willamette River
PCB Congeners	PCB 167	WB	4E-08	8E-07	3E-07	2E-06	24	Fifteen Mile Creek
PCB Congeners	PCB 189	WB	3E-08	6E-07	3E-07	2E-06	21	Willamette River
PCB Congeners	PCB 189	WB	4E-08	8E-07	4E-07	2E-06	24	Fifteen Mile Creek
Pesticides	Chlordane (total)	WB	8E-07	1E-05	7E-06	4E-05	21	Willamette River
Pesticides	Chlordane (total)	WB	2E-06	4E-05	2E-05	1E-04	24	Fifteen Mile Creek
Pesticides	DDD	WB	2E-07	4E-06	2E-06	1E-05	21	Willamette River
Pesticides	DDD	WB	7E-07	1E-05	6E-06	4E-05	24	Fifteen Mile Creek
Pesticides	DDE	WB	2E-06	3E-05	1E-05	9E-05	21	Willamette River
Pesticides	DDE	WB	3E-06	5E-05	2E-05	1E-04	24	Fifteen Mile Creek
Pesticides	DDT	WB	6E-07	1E-05	5E-06	3E-05	21	Willamette River
Pesticides	DDT	WB	6E-07	1E-05	5E-06	3E-05	24	Fifteen Mile Creek
Pesticides	Hexachlorobenzene	WB	7E-07	1E-05	6E-06	4E-05	21	Willamette River
Pesticides	Hexachlorobenzene	WB	2E-06	3E-05	1E-05	9E-05	24	Fifteen Mile Creek
Metals	Arsenic	WB	5E-06	1E-04	4E-05	3E-04	21	Willamette River
Metals	Arsenic	WB	3E-06	5E-05	2E-05	1E-04	24	Fifteen Mile Creek

NOTE:

FS - fillet with skin

WB - whole body

Risk estimates for detected chemicals only

Risk for General Public:

AFC - risk based on mean U.S. per capita consumption rate of uncooked freshwater and estuarine fish, 7.5 g/day (12 meals/yr) (USEPA 2000a)

HFC - risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish, 142.4 g/day (19 meals/mo) (USEPA 2000a)

Risk for Native American:

AFC - risk based on mean consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin, 63.2 g/day (2 meals/wk) (CRITFC 1994)

HFC - risk based on 99th percentile consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin, 389 g/day (12 meals/wk) (CRITFC 1994)

Chlordane (total) - sum of cis-chlordane, cis-nonachlor, gamma-chlordane, oxychlordane, and trans-nonachlor

Adjusted Aroclors - risk associated with non-dioxin-like PCB congeners

**Appendix J: Percent Contribution of
Detected Carcinogenic Chemicals to
Total Excess Cancer Risk**

**Anadromous Fish: Pacific lamprey
Fillet with skin and whole body samples**

Chemical Group	Chemical	Sample Type	Percent Contribution	Site	Waterbody
Dioxin/furans	2,3,7,8-TCDD	FS	0.60	21	Willamette River
Dioxin/furans	1,2,3,7,8-PeCDD	FS	2.4	21	Willamette River
Dioxin/furans	1,2,3,4,7,8-HxCDD	FS	0.17	21	Willamette River
Dioxin/furans	1,2,3,6,7,8-HxCDD	FS	0.41	21	Willamette River
Dioxin/furans	1,2,3,7,8,9-HxCDD	FS	0.11	21	Willamette River
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	FS	0.044	21	Willamette River
Dioxin/furans	OCDD	FS	0.00084	21	Willamette River
Dioxin/furans	2,3,7,8-TCDF	FS	3.2	21	Willamette River
Dioxin/furans	1,2,3,7,8-PeCDF	FS	0.13	21	Willamette River
Dioxin/furans	2,3,4,7,8-PeCDF	FS	1.3	21	Willamette River
Dioxin/furans	1,2,3,4,7,8-HxCDF	FS	0.19	21	Willamette River
Dioxin/furans	1,2,3,6,7,8-HxCDF	FS	0.20	21	Willamette River
Dioxin/furans	1,2,3,7,8,9-HxCDF	FS	0.098	21	Willamette River
Dioxin/furans	2,3,4,6,7,8-HxCDF	FS	0.36	21	Willamette River
Aroclors	Adjusted Aroclors	FS	24	21	Willamette River
PCB Congeners	PCB 77	FS	0.052	21	Willamette River
PCB Congeners	PCB 105	FS	2.8	21	Willamette River
PCB Congeners	PCB 114	FS	1.6	21	Willamette River
PCB Congeners	PCB 118	FS	8.2	21	Willamette River
PCB Congeners	PCB 123	FS	0.13	21	Willamette River
PCB Congeners	PCB 126	FS	35	21	Willamette River
PCB Congeners	PCB 156	FS	3.1	21	Willamette River
PCB Congeners	PCB 157	FS	0.57	21	Willamette River
PCB Congeners	PCB 167	FS	0.038	21	Willamette River
PCB Congeners	PCB 189	FS	0.045	21	Willamette River
Pesticides	Chlordane (total)	FS	2.2	21	Willamette River
Pesticides	DDD	FS	0.27	21	Willamette River
Pesticides	DDE	FS	2.7	21	Willamette River
Pesticides	DDT	FS	1.6	21	Willamette River
Pesticides	Hexachlorobenzene	FS	1.8	21	Willamette River
Metals	Arsenic	FS	6.8	21	Willamette River
Dioxin/furans	2,3,7,8-TCDD	WB	0.60	21	Willamette River
Dioxin/furans	2,3,7,8-TCDD	WB	0.51	24	Fifteen Mile Ck
Dioxin/furans	1,2,3,7,8-PeCDD	WB	2.4	21	Willamette River
Dioxin/furans	1,2,3,4,7,8-HxCDD	WB	0.15	21	Willamette River
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	0.26	21	Willamette River
Dioxin/furans	1,2,3,6,7,8-HxCDD	WB	0.36	24	Fifteen Mile Ck
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	0.084	21	Willamette River
Dioxin/furans	1,2,3,7,8,9-HxCDD	WB	0.048	24	Fifteen Mile Ck
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	0.050	21	Willamette River
Dioxin/furans	1,2,3,4,6,7,8-HpCDD	WB	0.041	24	Fifteen Mile Ck
Dioxin/furans	OCDD	WB	0.00064	21	Willamette River
Dioxin/furans	OCDD	WB	0.0012	24	Fifteen Mile Ck
Dioxin/furans	2,3,7,8-TCDF	WB	3.2	21	Willamette River
Dioxin/furans	2,3,7,8-TCDF	WB	4.9	24	Fifteen Mile Ck
Dioxin/furans	1,2,3,7,8-PeCDF	WB	0.28	21	Willamette River
Dioxin/furans	1,2,3,7,8-PeCDF	WB	0.35	24	Fifteen Mile Ck
Dioxin/furans	2,3,4,7,8-PeCDF	WB	0.94	21	Willamette River
Dioxin/furans	2,3,4,7,8-PeCDF	WB	0.67	24	Fifteen Mile Ck
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	0.18	21	Willamette River
Dioxin/furans	1,2,3,4,7,8-HxCDF	WB	0.26	24	Fifteen Mile Ck
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	0.16	21	Willamette River
Dioxin/furans	1,2,3,6,7,8-HxCDF	WB	0.25	24	Fifteen Mile Ck
Dioxin/furans	1,2,3,7,8,9-HxCDF	WB	0.096	21	Willamette River
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	0.21	21	Willamette River
Dioxin/furans	2,3,4,6,7,8-HxCDF	WB	0.19	24	Fifteen Mile Ck

**Appendix J: Percent Contribution of
Detected Carcinogenic Chemicals to
Total Excess Cancer Risk**

**Anadromous Fish: Pacific lamprey
Fillet with skin and whole body samples**

Chemical Group	Chemical	Sample Type	Percent Contribution	Site	Waterbody
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	0.0089	21	Willamette River
Dioxin/furans	1,2,3,4,6,7,8-HpCDF	WB	0.014	24	Fifteen Mile Ck
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	0.0034	21	Willamette River
Dioxin/furans	1,2,3,4,7,8,9-HpCDF	WB	0.0024	24	Fifteen Mile Ck
Dioxin/furans	OCDF	WB	0.000060	21	Willamette River
Dioxin/furans	OCDF	WB	0.00013	24	Fifteen Mile Ck
Aroclors	Adjusted Aroclors	WB	23	21	Willamette River
Aroclors	Adjusted Aroclors	WB	25	24	Fifteen Mile Ck
PCB Congeners	PCB 77	WB	0.053	21	Willamette River
PCB Congeners	PCB 77	WB	0.054	24	Fifteen Mile Ck
PCB Congeners	PCB 105	WB	2.0	21	Willamette River
PCB Congeners	PCB 105	WB	2.8	24	Fifteen Mile Ck
PCB Congeners	PCB 114	WB	1.4	21	Willamette River
PCB Congeners	PCB 114	WB	1.5	24	Fifteen Mile Ck
PCB Congeners	PCB 118	WB	6.0	21	Willamette River
PCB Congeners	PCB 118	WB	8.1	24	Fifteen Mile Ck
PCB Congeners	PCB 123	WB	0.087	21	Willamette River
PCB Congeners	PCB 123	WB	0.11	24	Fifteen Mile Ck
PCB Congeners	PCB 126	WB	44	21	Willamette River
PCB Congeners	PCB 126	WB	40	24	Fifteen Mile Ck
PCB Congeners	PCB 156	WB	2.9	21	Willamette River
PCB Congeners	PCB 156	WB	3.3	24	Fifteen Mile Ck
PCB Congeners	PCB 157	WB	0.23	21	Willamette River
PCB Congeners	PCB 157	WB	0.64	24	Fifteen Mile Ck
PCB Congeners	PCB 167	WB	0.036	21	Willamette River
PCB Congeners	PCB 167	WB	0.040	24	Fifteen Mile Ck
PCB Congeners	PCB 189	WB	0.040	21	Willamette River
PCB Congeners	PCB 189	WB	0.042	24	Fifteen Mile Ck
Pesticides	Chlordane (total)	WB	1.0	21	Willamette River
Pesticides	Chlordane (total)	WB	2.0	24	Fifteen Mile Ck
Pesticides	DDD	WB	0.27	21	Willamette River
Pesticides	DDD	WB	0.70	24	Fifteen Mile Ck
Pesticides	DDE	WB	2.3	21	Willamette River
Pesticides	DDE	WB	2.7	24	Fifteen Mile Ck
Pesticides	DDT	WB	0.75	21	Willamette River
Pesticides	DDT	WB	0.63	24	Fifteen Mile Ck
Pesticides	Hexachlorobenzene	WB	0.95	21	Willamette River
Pesticides	Hexachlorobenzene	WB	1.7	24	Fifteen Mile Ck
Metals	Arsenic	WB	6.5	21	Willamette River
Metals	Arsenic	WB	2.5	24	Fifteen Mile Ck

NOTE:

FS - fillet with skin

WB - whole body

Chlordane (total) - sum of cis-chlordane, cis-nonachlor, gamma-chlordane, oxychlordane, and trans-nonachlor

Adjusted Aroclors - sum of Aroclors minus the sum of PCB congeners; risk calculated using RfD for Aroclor 1254



Region 10, 1200 Sixth Avenue, Seattle WA 98101

**COLUMBIA RIVER BASIN FISH
CONTAMINANT SURVEY**

**VOLUME I
Appendix K**

Radionuclide Data

January 2002

**Prepared by
U.S. Environmental Protection Agency
Region 10
Seattle, Washington**

Explanation of column headings in radionuclide data

Client ID: Region 10 sample identifier.

Matrix: fish in this case.

NAREL ID: Laboratory sample identifier.

Collect Start/end: sample collection date.

Ana. ID: Analyst identifier.

QC: Type of QC sample (if applicable).

Procedure: Type of analysis. ALPBET for gross alpha/beta, GAMMA for gamma spectroscopy, U for uranium, PU for plutonium, SR for strontium.

Aliquot: Amount of sample used.

Unit: Units of aliquot.

Dry/wet: Ratio of sample dry weight to wet weight.

Ash/dry: Ratio of sample ash weight to dry weight.

Analyte: Radionuclides analyzed.

Conc: Concentration

2*CSU: Two standard deviations of the concentration.

MDC: Minimum detectable concentration for the analysis.

Unit: Units for Conc, 2*CSU and MDC.

Res Date: The date to which analysis results were decay-corrected.

Client ID	Matrix	BARRINGER ID	Collect Start	Collect End	Ana. ID	QC	Procedure	EXT (g)	LSC(g)	%REC	OVERALL %REC	Analyte	Conc.	Data Qualifiers	2*CSU	MDC	Unit	Anal Date
97304975	FISH	9906110-01A	08/19/1997 00:00	08/19/1997 00:00			TC	1.180E+01	9.050E+00	7.670E-01	2.230E-01	TC99	-1.400E+01	UJ	5.000E+00	9.000E+00	PCI/GWET	07/07/99
97304976	FISH	9906110-02A	08/16/1997 00:00	08/16/1997 00:00			TC	1.260E+01	9.020E+00	7.160E-01	2.080E-01	TC99	-1.100E+01	UJ	5.600E+00	1.000E+01	PCI/GWET	07/07/99
97304977	FISH	9906110-03A	08/16/1997 00:00	08/16/1997 00:00			TC	1.307E+01	9.020E+00	6.900E-01	2.010E-01	TC99	-2.300E+01	UJ	4.400E+00	9.000E+00	PCI/GWET	07/07/99
97310800	FISH	9906110-04A	08/15/1997 00:00	08/15/1997 00:00			TC	1.180E+01	9.040E+00	7.660E-01	2.230E-01	TC99	-9.000E+00	UJ	5.600E+00	1.000E+01	PCI/GWET	07/07/99
97310801	FISH	9906110-05A	08/15/1997 00:00	08/15/1997 00:00			TC	1.327E+01	9.020E+00	6.800E-01	1.970E-01	TC99	-1.100E+01	UJ	5.500E+00	1.000E+01	PCI/GWET	07/07/99
97310802	FISH	9906110-06A	08/15/1997 00:00	08/15/1997 00:00			TC	1.220E+01	9.000E+00	7.380E-01	2.140E-01	TC99	-1.300E+01	UJ	4.900E+00	9.000E+00	PCI/GWET	07/07/99
97470992	FISH	9906110-07A	01/13/1998 00:00	01/13/1998 00:00			TC	1.240E+01	9.030E+00	7.280E-01	2.120E-01	TC99	-2.200E+01	UJ	4.700E+00	9.000E+00	PCI/GWET	07/07/99
97470996	FISH	9906110-08A	01/14/1998 00:00	01/14/1998 00:00			TC	1.293E+01	9.010E+00	6.970E-01	2.020E-01	TC99	-2.400E+01	UJ	5.500E+00	1.000E+01	PCI/GWET	07/07/99
97500953	FISH	9906110-09A	01/08/1998 00:00	01/08/1998 00:00			TC	1.286E+01	9.010E+00	7.010E-01	2.040E-01	TC99	-2.200E-01	UJ	5.900E+00	1.000E+01	PCI/GWET	07/07/99
97500972	FISH	9906110-10A	01/14/1998 00:00	01/14/1998 00:00			TC	1.276E+01	9.050E+00	7.090E-01	2.060E-01	TC99	4.200E+00	UJ	5.100E+00	8.000E+00	PCI/GWET	07/07/99
98024000	FISH	9906110-11A	01/20/1998 00:00	01/20/1998 00:00			TC	1.239E+01	9.020E+00	7.280E-01	2.120E-01	TC99	-9.000E-01	UJ	5.500E+00	9.000E+00	PCI/GWET	07/07/99
97470990	FISH	9906110-12A	01/14/1998 00:00	01/14/1998 00:00			TC	1.266E+01	9.060E+00	7.160E-01	2.080E-01	TC99	-1.300E+01	UJ	6.600E+00	1.000E+01	PCI/GWET	07/07/99
97470991	FISH	9906110-13A	01/13/1998 00:00	01/13/1998 00:00			TC	1.251E+01	9.100E+00	7.270E-01	2.110E-01	TC99	-1.000E+01	UJ	6.400E+00	1.000E+01	PCI/GWET	07/07/99
97500950	FISH	9906110-14A	01/08/1998 00:00	01/08/1998 00:00			TC	1.193E+01	9.070E+00	7.600E-01	2.210E-01	TC99	-4.300E+00	UJ	5.200E+00	9.000E+00	PCI/GWET	07/07/99
97500969	FISH	9906110-15A	01/14/1998 00:00	01/14/1998 00:00			TC	1.291E+01	9.080E+00	7.030E-01	2.040E-01	TC99	-1.200E+01	UJ	6.500E+00	1.000E+01	PCI/GWET	08/16/99
97500970	FISH	9906110-16A	01/08/1998 00:00	01/08/1998 00:00			TC	1.250E+01	9.060E+00	7.250E-01	2.110E-01	TC99	-4.500E+00	UJ	5.700E+00	1.000E+01	PCI/GWET	07/07/99
97500971	FISH	9906110-17A	01/07/1998 00:00	01/07/1998 00:00			TC	1.288E+01	9.060E+00	7.030E-01	2.040E-01	TC99	6.700E-01	UJ	5.400E+00	9.000E+00	PCI/GWET	07/07/99
98024001	FISH	9906110-18A	01/20/1998 00:00	01/20/1998 00:00			TC	1.385E+01	9.000E+00	6.500E-01	1.890E-01	TC99	-1.600E+01	UJ	6.100E+00	1.000E+01	PCI/GWET	07/07/99
QC	AQUEOUS	BLANK-220				BLANK	TC	1.250E+01	9.000E+00	7.200E-01	2.090E-01	TC99	2.200E+00		6.900E+00	1.000E+01	PCI/GWET	08/16/99
QC	AQUEOUS	BLANK-219				BLANK	TC	1.228E+01	9.010E+00	7.340E-01	2.130E-01	TC99	-1.400E-01		5.100E+00	9.000E+00	PCI/GWET	07/08/99
QC	FISH	9906110-09AX				DUP	TC	1.313E+01	9.010E+00	6.860E-01	1.990E-01	TC99	3.700E+00		6.000E+00	1.000E+01	PCI/GWET	07/07/99
QC	FISH	9906110-01AX				DUP	TC	1.237E+01	9.020E+00	7.290E-01	2.120E-01	TC99	-1.300E+01		5.300E+00	1.000E+01	PCI/GWET	07/07/99
QC	FISH	9906110-02AP				MATRIX SPIKE	TC	1.222E+01	9.000E+00	7.360E-01	2.140E-01	TC99	5.600E+01		7.200E+00	1.000E+01	PCI/GWET	07/07/99
QC	AQUEOUS	LCS-220				SPIKE	TC	1.298E+01	9.030E+00	6.960E-01	2.020E-01	TC99	1.100E+02		7.900E+00	9.000E+00	PCI/GWET	07/07/99
QC	AQUEOUS	LCS-219				SPIKE	TC	1.259E+01	9.000E+00	7.150E-01	2.080E-01	TC99	8.600E+01		7.200E+00	9.000E+00	PCI/GWET	07/07/99

Client ID	Matrix	NAREL ID	Collect Start	Collect End	Ana. ID	QC	Procedure	Aliquot	Unit	Dry/Wet	Ash/Dry	Analyte	Conc.	2*CSU	MDC	Unit	Res Date
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361267J	DUP DUP	ALPBET	1.000E-01	GASH	2.860E-01	1.873E-01	Alpha	2.500E-01	2.500E-01	3.879E-01	PCI/GWET	02/03/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361267J		ALPBET	1.000E-01	GASH	2.860E-01	1.873E-01	Beta	2.450E+00	2.700E-01	2.111E-01	PCI/GWET	02/03/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00366878D		ALPBET	1.000E-01	GASH	2.860E-01	1.873E-01	Alpha	4.100E-01	3.200E-01	4.228E-01	PCI/GWET	02/03/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00366878D		ALPBET	1.000E-01	GASH	2.860E-01	1.873E-01	Beta	2.630E+00	2.800E-01	2.255E-01	PCI/GWET	02/03/98
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361272F		ALPBET	1.000E-01	GASH	2.742E-01	1.918E-01	Alpha	2.000E-02	1.700E-01	3.926E-01	PCI/GWET	02/03/98
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361272F		ALPBET	1.000E-01	GASH	2.742E-01	1.918E-01	Beta	2.960E+00	2.900E-01	2.136E-01	PCI/GWET	02/03/98
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361277L		ALPBET	1.000E-01	GASH	2.577E-01	2.040E-01	Alpha	5.000E-01	3.100E-01	3.633E-01	PCI/GWET	02/03/98
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361277L		ALPBET	1.000E-01	GASH	2.577E-01	2.040E-01	Beta	3.230E+00	3.000E-01	2.092E-01	PCI/GWET	02/03/98
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361286M		ALPBET	1.000E-01	GASH	2.226E-01	8.372E-02	Alpha	-1.400E-02	4.700E-02	1.257E-01	PCI/GWET	02/03/98
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361286M		ALPBET	1.000E-01	GASH	2.226E-01	8.372E-02	Beta	2.210E+00	1.400E-01	7.065E-02	PCI/GWET	02/03/98
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361291J		ALPBET	1.000E-01	GASH	2.262E-01	9.939E-02	Alpha	1.200E-01	1.000E-01	1.437E-01	PCI/GWET	02/03/98
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361291J		ALPBET	1.000E-01	GASH	2.262E-01	9.939E-02	Beta	2.740E+00	1.700E-01	8.612E-02	PCI/GWET	02/03/98
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361296P		ALPBET	1.000E-01	GASH	2.282E-01	9.147E-02	Alpha	7.900E-02	8.300E-02	1.218E-01	PCI/GWET	02/03/98
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361296P		ALPBET	1.000E-01	GASH	2.282E-01	9.147E-02	Beta	2.550E+00	1.600E-01	8.079E-02	PCI/GWET	02/03/98
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361310U		ALPBET	1.000E-01	GASH	2.558E-01	4.909E-02	Alpha	1.380E-01	7.600E-02	7.890E-02	PCI/GWET	02/03/98
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361310U		ALPBET	1.000E-01	GASH	2.558E-01	4.909E-02	Beta	1.564E+00	9.600E-02	4.803E-02	PCI/GWET	02/03/98
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361315Z		ALPBET	1.000E-01	GASH	2.623E-01	5.279E-02	Alpha	3.000E-02	5.200E-02	9.479E-02	PCI/GWET	02/03/98
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361315Z		ALPBET	1.000E-01	GASH	2.623E-01	5.279E-02	Beta	2.420E+00	1.300E-01	5.431E-02	PCI/GWET	02/03/98
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	366879		ALPBET	1.000E-01	GASH	2.716E-01	5.510E-02	Alpha	7.000E-03	4.100E-02	9.395E-02	PCI/GWET	02/03/98
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	366879		ALPBET	1.000E-01	GASH	2.716E-01	5.510E-02	Beta	2.550E+00	1.300E-01	5.589E-02	PCI/GWET	02/03/98

														Data					
Client ID	Matrix	NAREL ID	Collect Start	Collect End	Ana. ID	QC	Procedure	Aliquot	Unit	Dry/Wet	Ash/Dry	Analyte	Conc.	Qualifiers	2*CSU	MDC	Unit	Res Date	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Am241				4.340E-02	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Ba140				2.560E+00	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Be7				1.630E-01	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Bi212	6.100E-02			4.900E-02	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Bi214	2.500E-02			1.100E-02	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Ce141				5.650E-02	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Ce144				4.680E-02	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Co58				1.750E-02	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Co60				9.640E-03	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Cs134				9.120E-03	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Cs137	4.400E-03			3.600E-03	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Eu152				1.880E-02	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Eu154				4.650E-02	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Fe59				6.190E-02	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	I131				6.100E+00	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	K40	2.570E+00			1.100E-01	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	La140				2.430E-02	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Mn54				8.340E-03	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Mo99				5.250E+00	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Na22				1.140E-02	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Nb95				1.740E-02	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Pb212	2.520E-02			9.300E-03	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Pb214	2.230E-02			8.900E-03	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Pr144				6.270E-01	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Ra224	1.100E-01			1.400E-01	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Ra226	1.000E-01	UJ		1.000E-01	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Ra228				2.550E-02	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Ru103				9.200E-02	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Ru106				7.490E-02	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Sh125				4.160E-02	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Ti208	6.100E-03			5.700E-03	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Zn65				3.050E-02	PCI/GWET	07/22/97	
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361266H		GAMMA	7.620E+02	GWET	2.860E-01	1.873E-01	Zr95				3.040E-02	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Am241				3.320E-02	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Ba140				3.800E+00	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Be7				2.240E-01	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Bi214	3.600E-02			1.500E-02	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Ce141				5.730E-02	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Ce144				5.150E-02	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Co58				2.790E-02	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Co60				1.800E-02	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Cs134				1.100E-02	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Cs137				1.210E-02	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Eu152				1.710E-02	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Eu154				9.120E-02	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Fe59				1.090E-01	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	I131				8.760E+00	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	K40	3.010E+00			1.900E-01	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	La140				4.710E-02	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Mn54				1.460E-02	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Mo99				5.780E+00	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Na22				1.800E-02	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Nb95				2.940E-02	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Pb212	3.700E-02			1.100E-02	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Pb214	3.100E-02			1.200E-02	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Pr144				1.030E+00	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-01	1.918E-01	Ra224	9.200E-02	U		9.700E-02	PCI/GWET	07/22/97	
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361322Y		GAMMA	7.550E+02	GWET	2.742E-									

97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Ce144				4.760E-02	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Co58				1.750E-02	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Co60				1.100E-02	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Cs134				1.100E-02	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Cs137	9.200E-03		3.300E-03		PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Eu152				1.990E-02	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Eu154				4.870E-02	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Fe59				6.950E-02	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	I131				6.860E+00	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	K40	2.950E+00		1.100E-01		PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	La140				2.890E-02	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Mn54				9.710E-03	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Mo99				5.500E+00	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Na22				1.240E-02	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Nb95				1.920E-02	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Pb212	2.320E-02		8.100E-03		PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Pb214	3.170E-02		8.800E-03		PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Pr144				6.660E-01	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Ra226				1.430E-01	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Ra228				2.810E-02	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Ru103				3.100E-02	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Ru106				7.920E-02	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Sb125				4.330E-02	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Ti208	6.800E-03		5.100E-03		PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Zn65				3.190E-02	PCI/GWET	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361276K	GAMMA	7.870E+02	GWET	2.577E-01	2.040E-01	Zr95				3.400E-02	PCI/GWET	07/22/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Am241				2.950E-02	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Ba140				2.400E+00	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Be7				1.610E-01	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Ce141				4.370E-02	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Ce144				3.600E-02	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Co58				1.630E-02	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Co60				1.030E-02	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Cs134				8.020E-03	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Cs137	8.100E-03		3.300E-03		PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Eu152				1.830E-02	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Eu154				5.390E-02	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Fe59				6.640E-02	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			I131				6.050E+00	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			K40	3.710E+00		1.200E-01		PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			La140				2.970E-02	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Mn54				9.060E-03	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Mo99				4.150E+00	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Na22				1.180E-02	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Nb95				1.920E-02	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Pr144				6.200E-01	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Ra226				1.160E-01	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Ra228				2.940E-02	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Ru103				2.960E-02	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Ru106				7.540E-02	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Sb125				4.320E-02	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Zn65				2.690E-02	PCI/GWET	07/23/97
97304978	FISH	97.08237V	07/23/1997 00:00	07/23/1997 00:00	00361281G	GAMMA	7.340E+02	GWET			Zr95				3.400E-02	PCI/GWET	07/23/97
97304979	FISH	97.08238W	07/23/1997 00:00	07/23/1997 00:00	00361282H	GAMMA	8.930E+02	GWET			Am241				2.290E-02	PCI/GWET	07/23/97
97304979	FISH	97.08238W	07/23/1997 00:00	07/23/1997 00:00	00361282H	GAMMA	8.930E+02	GWET			Ba140				1.640E+00	PCI/GWET	07/23/97
97304979	FISH	97.08238W	07/23/1997 00:00	07/23/1997 00:00	00361282H	GAMMA	8.930E+02	GWET			Be7				1.050E-01	PCI/GWET	07/23/97
97304979	FISH	97.08238W	07/23/1997 00:00	07/23/1997 00:00	00361282H	GAMMA	8.930E+02	GWET			Ce141				2.840E-02	PCI/GWET	07/23/97
97304979	FISH	97.08238W	07/23/1997 00:00	07/23/1997 00:00	00361282H	GAMMA	8.930E+02	GWET			Ce144				2.440E-02	PCI/GWET	07/23/97
97304979	FISH	97.08238W	07/23/1997 00:00	07/23/1997 00:00	00361282H	GAMMA	8.930E+02	GWET			Co58				1.040E-02	PCI/GWET	07/23/97
97304979	FISH	97.08238W	07/23/1997 00:00	07/23/1997 00:00	00361282H	GAMMA	8.930E+02	GWET			Co60				6.580E-03	PCI/GWET	07/23/97
97304979	FISH	97.08238W	07/23/1997 00:00	07/23/1997 00:00	00361282H	GAMMA	8.930E+02	GWET			Cs134				4.580E-03	PCI/GWET	07/23/97
97304979	FISH	97.08238W	07/23/1997 00:00	07/23/1997 00:00	00361282H	GAMMA	8.930E+02	GWET			Cs137	8.000E-03		2.300E-03		PCI/GWET	07/23/97
97304979	FISH	97.08238W	07/23/1997 00:00	07/23/1997 00:00	00361282H	GAMMA	8.930E+02	GWET			Eu152				1.070E-02	PCI/GWET	07/23/97
97304979	FISH	97.08238W	07/23/1997 00:00	07/23/1997 00:00	00361282H	GAM											

97304979	FISH	97.08238W	07/23/1997 00:00	07/23/1997 00:00	00361282H	GAMMA	8.930E+02	GWET		Ra226			7.780E-02	PCI/GWET	07/23/97
97304979	FISH	97.08238W	07/23/1997 00:00	07/23/1997 00:00	00361282H	GAMMA	8.930E+02	GWET		Ra228			1.740E-02	PCI/GWET	07/23/97
97304979	FISH	97.08238W	07/23/1997 00:00	07/23/1997 00:00	00361282H	GAMMA	8.930E+02	GWET		Ru103			1.830E-02	PCI/GWET	07/23/97
97304979	FISH	97.08238W	07/23/1997 00:00	07/23/1997 00:00	00361282H	GAMMA	8.930E+02	GWET		Ru106			4.540E-02	PCI/GWET	07/23/97
97304979	FISH	97.08238W	07/23/1997 00:00	07/23/1997 00:00	00361282H	GAMMA	8.930E+02	GWET		Sb125			2.400E-02	PCI/GWET	07/23/97
97304979	FISH	97.08238W	07/23/1997 00:00	07/23/1997 00:00	00361282H	GAMMA	8.930E+02	GWET		Zn65			1.570E-02	PCI/GWET	07/23/97
97304979	FISH	97.08238W	07/23/1997 00:00	07/23/1997 00:00	00361282H	GAMMA	8.930E+02	GWET		Zr95			1.840E-02	PCI/GWET	07/23/97
97304980	FISH	97.08239X	07/23/1997 00:00	07/23/1997 00:00	00361284K	GAMMA	7.060E+02	GWET		Am241			8.930E-02	PCI/GWET	07/23/97
97304980	FISH	97.08239X	07/23/1997 00:00	07/23/1997 00:00	00361284K	GAMMA	7.060E+02	GWET		Ba140			2.980E+00	PCI/GWET	07/23/97
97304980	FISH	97.08239X	07/23/1997 00:00	07/23/1997 00:00	00361284K	GAMMA	7.060E+02	GWET		Be7			1.980E-01	PCI/GWET	07/23/97
97304980	FISH	97.08239X	07/23/1997 00:00	07/23/1997 00:00	00361284K	GAMMA	7.060E+02	GWET		Ce141			6.060E-02	PCI/GWET	07/23/97
97304980	FISH	97.08239X	07/23/1997 00:00	07/23/1997 00:00	00361284K	GAMMA	7.060E+02	GWET		Ce144			5.580E-02	PCI/GWET	07/23/97
97304980	FISH	97.08239X	07/23/1997 00:00	07/23/1997 00:00	00361284K	GAMMA	7.060E+02	GWET		Co58			1.990E-02	PCI/GWET	07/23/97
97304980	FISH	97.08239X	07/23/1997 00:00	07/23/1997 00:00	00361284K	GAMMA	7.060E+02	GWET		Co60			1.380E-02	PCI/GWET	07/23/97
97304980	FISH	97.08239X	07/23/1997 00:00	07/23/1997 00:00	00361284K	GAMMA	7.060E+02	GWET		Cs134			1.080E-02	PCI/GWET	07/23/97
97304980	FISH	97.08239X	07/23/1997 00:00	07/23/1997 00:00	00361284K	GAMMA	7.060E+02	GWET	8.900E-03	Cs137	4.300E-03			PCI/GWET	07/23/97
97304980	FISH	97.08239X	07/23/1997 00:00	07/23/1997 00:00	00361284K	GAMMA	7.060E+02	GWET		Eu152			2.180E-02	PCI/GWET	07/23/97
97304980	FISH	97.08239X	07/23/1997 00:00	07/23/1997 00:00	00361284K	GAMMA	7.060E+02	GWET		Eu154			6.440E-02	PCI/GWET	07/23/97
97304980	FISH	97.08239X	07/23/1997 00:00	07/23/1997 00:00	00361284K	GAMMA	7.060E+02	GWET		Fe59			7.910E-02	PCI/GWET	07/23/97
97304980	FISH	97.08239X	07/23/1997 00:00	07/23/1997 00:00	00361284K	GAMMA	7.060E+02	GWET		I131			7.740E+00	PCI/GWET	07/23/97
97304980	FISH	97.08239X	07/23/1997 00:00	07/23/1997 00:00	00361284K	GAMMA	7.060E+02	GWET	3.530E+00	K40	1.400E-01			PCI/GWET	07/23/97
97304980	FISH	97.08239X	07/23/1997 00:00	07/23/1997 00:00	00361284K	GAMMA	7.060E+02	GWET		La140			3.440E-02	PCI/GWET	07/23/97
97304980	FISH	97.08239X	07/23/1997 00:00	07/23/1997 00:00	00361284K	GAMMA	7.060E+02	GWET		Mn54			1.070E-02	PCI/GWET	07/2

97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361320W	DUP	GAMMA	3.360E+03	GWET	2.226E-01	8.372E-02	Eu154	1.890E-02	PCI/GWET	07/28/97
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361320W	DUP	GAMMA	3.360E+03	GWET	2.226E-01	8.372E-02	Fe59	2.340E-02	PCI/GWET	07/28/97
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361320W	DUP	GAMMA	3.360E+03	GWET	2.226E-01	8.372E-02	I131	3.670E+00	PCI/GWET	07/28/97
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361320W	DUP	GAMMA	3.360E+03	GWET	2.226E-01	8.372E-02	K40	1.960E+00	PCI/GWET	07/28/97
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361320W	DUP	GAMMA	3.360E+03	GWET	2.226E-01	8.372E-02	La140	4.500E-02	PCI/GWET	07/28/97
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361320W	DUP	GAMMA	3.360E+03	GWET	2.226E-01	8.372E-02	Mn54	1.240E-02	PCI/GWET	07/28/97
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361320W	DUP	GAMMA	3.360E+03	GWET	2.226E-01	8.372E-02	Mo99	3.700E-03	PCI/GWET	07/28/97
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361320W	DUP	GAMMA	3.360E+03	GWET	2.226E-01	8.372E-02	Na22	3.850E+00	PCI/GWET	07/28/97
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361320W	DUP	GAMMA	3.360E+03	GWET	2.226E-01	8.372E-02	Nb95	3.680E-03	PCI/GWET	07/28/97
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361320W	DUP	GAMMA	3.360E+03	GWET	2.226E-01	8.372E-02	Nb95	7.200E-03	PCI/GWET	07/28/97
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361320W	DUP	GAMMA	3.360E+03	GWET	2.226E-01	8.372E-02	Pr144	2.560E-01	PCI/GWET	07/28/97
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361320W	DUP	GAMMA	3.360E+03	GWET	2.226E-01	8.372E-02	Ra226	9.450E-02	PCI/GWET	07/28/97
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361320W	DUP	GAMMA	3.360E+03	GWET	2.226E-01	8.372E-02	Ra228	1.040E-02	PCI/GWET	07/28/97
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361320W	DUP	GAMMA	3.360E+03	GWET	2.226E-01	8.372E-02	Ru103	1.320E-02	PCI/GWET	07/28/97
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361320W	DUP	GAMMA	3.360E+03	GWET	2.226E-01	8.372E-02	Ru106	3.390E-02	PCI/GWET	07/28/97
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361320W	DUP	GAMMA	3.360E+03	GWET	2.226E-01	8.372E-02	Sb125	1.920E-02	PCI/GWET	07/28/97
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361320W	DUP	GAMMA	3.360E+03	GWET	2.226E-01	8.372E-02	Zn65	1.030E-02	PCI/GWET	07/28/97
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361320W	DUP	GAMMA	3.360E+03	GWET	2.226E-01	8.372E-02	Zr95	1.260E-02	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Am241	5.140E-02	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Ba140	9.680E-01	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Be7	7.820E-02	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Ce141	4.250E-02	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Ce144	4.200E-02	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Co58	7.360E-03	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Co60	3.730E-03	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Cs134	4.440E-03	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Cs137	3.540E-03	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Eu152	1.160E-02	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Eu154	1.960E-02	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Fe59	2.420E-02	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	I131	3.820E+00	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	K40	2.160E+00	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	La140	4.900E-02	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	La140	1.330E-02	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Mn54	4.030E-03	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Mo99	4.110E+00	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Na22	4.160E-03	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Nb95	7.030E-03	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Pr144	2.720E-01	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Ra226	1.010E-01	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Ra228	1.110E-02	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Ru103	1.410E-02	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Ru106	3.630E-02	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Sb125	2.050E-02	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Zn65	1.070E-02	PCI/GWET	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361290H	DUP	GAMMA	3.150E+03	GWET	2.262E-01	9.939E-02	Zr95	1.280E-02	PCI/GWET	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361295N	DUP	GAMMA	2.980E+03	GWET	2.282E-01	9.147E-02	Am241	5.320E-02	PCI/GWET	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361295N	DUP	GAMMA	2.980E+03	GWET	2.282E-01	9.147E-02	Ba140	1.110E+00	PCI/GWET	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361295N	DUP	GAMMA	2.980E+03	GWET	2.282E-01	9.147E-02	Be7	8.440E-02	PCI/GWET	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361295N	DUP	GAMMA	2.980E+03	GWET	2.282E-01	9.147E-02	Ce141	4.620E-02	PCI/GWET	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361295N	DUP	GAMMA	2.980E+03	GWET	2.282E-01	9.147E-02	Ce144	4.220E-02	PCI/GWET	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361295N	DUP	GAMMA	2.980E+03	GWET	2.282E-01	9.147E-02	Co58	7.480E-03	PCI/GWET	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361295N	DUP	GAMMA	2.980E+03	GWET	2.282E-01	9.147E-02	Co60	4.180E-03	PCI/GWET	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361295N	DUP	GAMMA	2.980E+03	GWET	2.282E-01	9.147E-02	Cs134	4.510E-03	PCI/GWET	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361295N	DUP	GAMMA	2.980E+03	GWET	2.282E-01	9.147E-02	Cs137	2.100E-03	PCI/GWET	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361295N	DUP	GAMMA	2.980E+03	GWET	2.282E-01	9.147E-02	Eu152	1.230E-02	PCI/GWET	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361295N	DUP	GAMMA	2.980E+03	GWET	2.282E-01	9.147E-02	Eu154	2.200E-02	PCI/GWET	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361295N	DUP	GAMMA	2.980E+03	GWET	2.282E-01	9.147E-02	Fe59	2.450E-02	PCI/GWET	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361295N	DUP	GAMMA	2.980E+03	GWET	2.282E-01	9.147E-02	I131	4.200E+00	PCI/GWET	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361295N	DUP	GAMMA	2.980E+03	GWET	2.282E-01	9.147E-02	K40	2.270E+00	PCI/GWET	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361295N	DUP	GAMMA	2.980E+03	GWET	2.282E-01	9.147E-02	La140	1.300E-02	PCI/GWET	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361295N	DUP	GAMMA	2.980E+03	GWET	2.282E-01	9.147E-02	Mn54	4.100E-03	PCI/GWET	07/28/97
97310802															

97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Be7			1.280E+00	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Ce141			1.200E+00	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Ce144			5.090E-02	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Co58			8.270E-02	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Co60			1.470E-02	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Cs134			8.980E-03	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Cs137	3.700E-03	3.600E-03		PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Eu152			1.640E-02	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Eu154			6.670E-02	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Fe59			8.710E-01	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	I131			5.690E+00	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	K40	2.950E+00	1.700E-01		PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	La140			3.390E-02	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Mn54			1.460E-02	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Mo99			3.920E+00	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Na22			1.720E-02	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Nb95			1.110E-01	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Pr144			1.100E+00	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Ra226	5.000E-02	UJ	9.900E-02	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Ra228			3.510E-02	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Ru103			4.780E-01	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Ru106			1.080E-01	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Sb125			4.820E-02	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Zn65			4.870E-02	PCI/GWET	02/19/97
97080815	FISH	97.08243T	02/19/1997 00:00	02/19/1997 00:00	00361303V	GAMMA	1.040E+03	GWET	Zr95			2.030E-01	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Am241			2.880E-02	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Ba140			2.450E+01	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Be7			1.190E+00	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Ce141			1.060E+00	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Ce144			4.990E-02	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Co58			8.340E-02	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Co60			1.180E-02	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Cs134			8.240E-03	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Cs137	6.900E-03	3.600E-03		PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Eu152			1.740E-02	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Eu154			5.230E-02	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Fe59			8.520E-01	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	I131			6.100E+00	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	K40	3.320E+00	1.400E-01		PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	La140			3.050E-02	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Mn54			1.280E-02	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Mo99			3.500E+00	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Na22			1.350E-02	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Nb95			1.020E-01	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Pr144			9.540E-01	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Ra226			1.070E-01	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Ra228			3.220E-02	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Ru103			4.580E-01	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Ru106			1.020E-01	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Sb125			4.870E-02	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Zn65			4.820E-02	PCI/GWET	02/19/97
97080816	FISH	97.08244U	02/19/1997 00:00	02/19/1997 00:00	00361304W	GAMMA	1.040E+03	GWET	Zr95			1.840E-01	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Am241			2.390E-02	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Ba140			1.780E+01	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Be7			9.700E-01	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Ce141			1.030E+00	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Ce144			4.620E-02	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Co58			5.860E-02	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Co60			8.720E-03	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Cs134			7.060E-03	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Cs137	5.300E-03	3.300E-03		PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Eu152			1.360E-02	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Eu154			3.900E-02	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Fe59			6.770E-01	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	I131			4.590E+00	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	K40	3.080E+00	1.000E-01		PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	La140			2.420E-02	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Mn54			9.680E-03	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Mo99			3.440E+00	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Na22			9.820E-03	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Nb95			7.650E-02	PCI/GWET	02/19/97

97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Ra224	5.800E-02	5.300E-02	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Ra226		8.650E-02	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Ra228		2.160E-02	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Ru103		3.670E-01	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Ru106		7.930E-02	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Sb125		3.560E-02	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Zn65		3.480E-02	PCI/GWET	02/19/97
97080817	FISH	97.08245V	02/19/1997 00:00	02/19/1997 00:00	00361305X	GAMMA	1.050E+03	GWET	Zr95		1.360E-01	PCI/GWET	02/19/97
97080818	FISH	97.08246W	02/19/1997 00:00	02/19/1997 00:00	00361306Y	GAMMA	1.060E+03	GWET	Am241		2.870E-02	PCI/GWET	02/19/97
97080818	FISH	97.08246W	02/19/1997 00:00	02/19/1997 00:00	00361306Y	GAMMA	1.060E+03	GWET	Ba140		1.750E+01	PCI/GWET	02/19/97
97080818	FISH	97.08246W	02/19/1997 00:00	02/19/1997 00:00	00361306Y	GAMMA	1.060E+03	GWET	Be7		9.380E-01	PCI/GWET	02/19/97
97080818	FISH	97.08246W	02/19/1997 00:00	02/19/1997 00:00	00361306Y	GAMMA	1.060E+03	GWET	Ce141		1.010E+00	PCI/GWET	02/19/97
97080818	FISH	97.08246W	02/19/1997 00:00	02/19/1997 00:00	00361306Y	GAMMA	1.060E+03	GWET	Ce144		4.430E-02	PCI/GWET	02/19/97
97080818	FISH	97.08246W	02/19/1997 00:00	02/19/1997 00:00	00361306Y	GAMMA	1.060E+03	GWET	Co58		5.930E-02	PCI/GWET	02/19/97
97080818	FISH	97.08246W	02/19/1997 00:00	02/19/1997 00:00	00361306Y	GAMMA	1.060E+03	GWET	Co60		7.710E-03	PCI/GWET	02/19/97
97080818	FISH	97.08246W	02/19/1997 00:00	02/19/1997 00:00	00361306Y	GAMMA	1.060E+03	GWET	Cs134		7.180E-03	PCI/GWET	02/19/97
97080818	FISH	97.08246W	02/19/1997 00:00	02/19/1997 00:00	00361306Y	GAMMA	1.060E+03	GWET	Cs137	4.500E-03	2.300E-03	PCI/GWET	02/19/97
97080818	FISH	97.08246W	02/19/1997 00:00	02/19/1997 00:00	00361306Y	GAMMA	1.060E+03	GWET	Eu152		1.460E-02	PCI/GWET	02/19/97
97080818	FISH	97.08246W	02/19/1997 00:00	02/19/1997 00:00	00361306Y	GAMMA	1.060E+03	GWET	Eu154		3.850E-02	PCI/GWET	02/19/97
97080818	FISH	97.08246W	02/19/1997 00:00	02/19/1997 00:00	00361306Y	GAMMA	1.060E+03	GWET	Fe59		6.070E-01	PCI/GWET	02/19/97
97080818	FISH	97.08246W	02/19/1997 00:00	02/19/1997 00:00	00361306Y	GAMMA	1.060E+03	GWET	I131		4.830E+00	PCI/GWET	02/19/97
97080818	FISH	97.08246W	02/19/1997 00:00	02/19/1997 00:00	00361306Y	GAMMA	1.060E+03	GWET	K40	3.300E+00	9.400E-02	PCI/GWET	02/19/97
97080818	FISH	97.08246W	02/19/1997 00:00	02/19/1997 00:00	00361306Y	GAMMA	1.060E+03	GWET	La140		2.280E-02	PCI/GWET	02/19/97
97080818	FISH	97.08246W	02/19/1997 00:00	02/19/1997 00:00	00361306Y	GAMMA	1.060E+03	GWET	Mn54		8.820E-03	PCI/GWET	02/19/97

97080820	FISH	97.08248Y	02/19/1997 00:00	02/19/1997 00:00	00361308A	GAMMA	1.060E+03	GWET		Eu154				3.890E-02	PCI/GWET	02/19/97	
97080820	FISH	97.08248Y	02/19/1997 00:00	02/19/1997 00:00	00361308A	GAMMA	1.060E+03	GWET		Fe59				5.570E-01	PCI/GWET	02/19/97	
97080820	FISH	97.08248Y	02/19/1997 00:00	02/19/1997 00:00	00361308A	GAMMA	1.060E+03	GWET		I131				4.450E+00	PCI/GWET	02/19/97	
97080820	FISH	97.08248Y	02/19/1997 00:00	02/19/1997 00:00	00361308A	GAMMA	1.060E+03	GWET		K40	2.960E+00		9.000E-02		PCI/GWET	02/19/97	
97080820	FISH	97.08248Y	02/19/1997 00:00	02/19/1997 00:00	00361308A	GAMMA	1.060E+03	GWET		La140				2.000E-02	PCI/GWET	02/19/97	
97080820	FISH	97.08248Y	02/19/1997 00:00	02/19/1997 00:00	00361308A	GAMMA	1.060E+03	GWET		Mn54				9.740E-03	PCI/GWET	02/19/97	
97080820	FISH	97.08248Y	02/19/1997 00:00	02/19/1997 00:00	00361308A	GAMMA	1.060E+03	GWET		Mo99				3.300E+00	PCI/GWET	02/19/97	
97080820	FISH	97.08248Y	02/19/1997 00:00	02/19/1997 00:00	00361308A	GAMMA	1.060E+03	GWET		Na22				8.950E-03	PCI/GWET	02/19/97	
97080820	FISH	97.08248Y	02/19/1997 00:00	02/19/1997 00:00	00361308A	GAMMA	1.060E+03	GWET		Nb95				7.460E-02	PCI/GWET	02/19/97	
97080820	FISH	97.08248Y	02/19/1997 00:00	02/19/1997 00:00	00361308A	GAMMA	1.060E+03	GWET		Pb212	5.700E-03	U	5.800E-03		PCI/GWET	02/19/97	
97080820	FISH	97.08248Y	02/19/1997 00:00	02/19/1997 00:00	00361308A	GAMMA	1.060E+03	GWET		Pr144				6.420E-01	PCI/GWET	02/19/97	
97080820	FISH	97.08248Y	02/19/1997 00:00	02/19/1997 00:00	00361308A	GAMMA	1.060E+03	GWET		Ra226				8.650E-02	PCI/GWET	02/19/97	
97080820	FISH	97.08248Y	02/19/1997 00:00	02/19/1997 00:00	00361308A	GAMMA	1.060E+03	GWET		Ra228				2.270E-02	PCI/GWET	02/19/97	
97080820	FISH	97.08248Y	02/19/1997 00:00	02/19/1997 00:00	00361308A	GAMMA	1.060E+03	GWET		Ru103				3.420E-01	PCI/GWET	02/19/97	
97080820	FISH	97.08248Y	02/19/1997 00:00	02/19/1997 00:00	00361308A	GAMMA	1.060E+03	GWET		Ru106				7.620E-02	PCI/GWET	02/19/97	
97080820	FISH	97.08248Y	02/19/1997 00:00	02/19/1997 00:00	00361308A	GAMMA	1.060E+03	GWET		Sb125				3.360E-02	PCI/GWET	02/19/97	
97080820	FISH	97.08248Y	02/19/1997 00:00	02/19/1997 00:00	00361308A	GAMMA	1.060E+03	GWET		Ti208	3.600E-03	U	4.200E-03		PCI/GWET	02/19/97	
97080820	FISH	97.08248Y	02/19/1997 00:00	02/19/1997 00:00	00361308A	GAMMA	1.060E+03	GWET		Zn65				3.100E-02	PCI/GWET	02/19/97	
97080820	FISH	97.08248Y	02/19/1997 00:00	02/19/1997 00:00	00361308A	GAMMA	1.060E+03	GWET		Zr95				1.310E-01	PCI/GWET	02/19/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Am241			2.230E-02	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Ba140			1.630E+01	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Be7			6.140E-01	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Ce141			4.730E-01	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Ce144			3.700E-02	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Co58			3.820E-02	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Co60			7.140E-03	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Cs134			7.260E-03	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Cs137	5.000E-03		2.700E-03		PCI/GWET	03/21/97
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Eu152			1.320E-02	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Eu154			3.680E-02	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Fe59			3.250E-01	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	I131			4.400E+00	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	K40	2.270E+00		8.300E-02		PCI/GWET	03/21/97
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	La140			2.030E-02	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Mn54			8.790E-03	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Mo99			2.980E+00	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Na22			9.000E-03	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Nb95			4.780E-02	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Pb212	9.900E-03		5.600E-03		PCI/GWET	03/21/97
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Pr144			5.640E-01	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Ra226			8.470E-02	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Ra228			2.040E-02	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Ru103			1.970E-01	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Ru106			6.890E-02	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Sb125			3.430E-02	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Ti208	4.300E-03		4.000E-03		PCI/GWET	03/21/97
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Zn65			3.190E-02	PCI/GWET	03/21/97	
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361309B	GAMMA	1.030E+03	GWET	2.558E-01	4.909E-02	Zr95			8.580E-02	PCI/GWET	03/21/97	
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361314Y	GAMMA	1.040E+03	GWET	2.623E-01	5.279E-02	Am241			1.910E-02	PCI/GWET	03/21/97	
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361314Y	GAMMA	1.040E+03	GWET	2.623E-01	5.279E-02	Ba140			1.280E+01	PCI/GWET	03/21/97	
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361314Y	GAMMA	1.040E+03	GWET	2.623E-01	5.279E-02	Be7			4.450E-01	PCI/GWET	03/21/97	
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361314Y	GAMMA	1.040E+03	GWET	2.623E-01	5.279E-02	Ce141			4.100E-01	PCI/GWET	03/21/97	
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361314Y	GAMMA	1.040E+03	GWET	2.623E-01	5.279E-02	Ce144			3.210E-02	PCI/GWET	03/21/97	
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361314Y	GAMMA	1.040E+03	GWET	2.623E-01	5.279E-02	Co58			2.950E-02	PCI/GWET	03/21/97	
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361314Y	GAMMA	1.040E+03	GWET	2.623E-01	5.279E-02	Co60			5.310E-03	PCI/GWET	03/21/97	
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361314Y	GAMMA	1.040E+03	GWET	2.623E-01	5.279E-02	Cs134			4.830E-03	PCI/GWET	03/21/97	
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361314Y	GAMMA	1.040E+03	GWET	2.623E-01	5.279E-02	Cs137	6.000E-03		1.900E-03		PCI/GWET	03/21/97
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361314Y	GAMMA	1.040E+03	GWET	2.623E-01	5.279E-02	Eu152			1.000E-02	PCI/GWET	03/21/97	
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361314Y	GAMMA	1.040E+03	GWET	2.623E-01	5.279E-02	Eu154			2.790E-02	PCI/GWET	03/21/97	
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361314Y	GAMMA	1.040E+03	GWET	2.623E-01	5.279E-02	Fe59			2.560E-01	PCI/GWET	03/21/97	
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361314Y	GAMMA	1.040E+03	GWET	2.623E-01	5.279E-02	I131			3.420E+00	PCI/GWET	03/21/97	
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361314Y	GAMMA	1.040E+03	GWET	2.623E-01	5.279E-02	K40	2.140E+00		6.600E-02		PCI/GWET	03/21/97
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361314Y	GAMMA	1.040E+03	GWET	2.623E-01	5.279E-02	La14						

97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361314Y	GAMMA	1.040E+03	GWET	2.623E-01	5.279E-02	Tl208	2.200E-03	U	3.200E-03		PCI/GWET	03/21/97
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361314Y	GAMMA	1.040E+03	GWET	2.623E-01	5.279E-02	Zn65				2.080E-02	PCI/GWET	03/21/97
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361314Y	GAMMA	1.040E+03	GWET	2.623E-01	5.279E-02	Zr95				6.850E-02	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Am241				5.040E-02	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Ba140				1.960E+01	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Be7				6.120E-01	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Ce141				5.560E-01	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Ce144				4.460E-02	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Co58				4.760E-02	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Co60				8.520E-03	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Cs134				9.130E-03	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Cs137	3.000E-03		2.700E-03		PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Eu152				1.460E-02	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Eu154				3.910E-02	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Fe59				3.660E-01	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	I131				4.720E+00	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	K40	2.120E+00		8.500E-02		PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	La140				2.390E-02	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Mn54				9.100E-03	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Mo99				3.720E+00	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Na22				9.100E-03	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Nb95				5.360E-02	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Pb212	5.500E-03	U	7.700E-03		PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Pr144				6.970E-01	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Ra226				8.670E-02	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Ra228				2.200E-02	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Ru103				2.150E-01	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Ru106				7.320E-02	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Sb125				3.390E-02	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Zn65				3.280E-02	PCI/GWET	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00361319D	GAMMA	1.090E+03	GWET	2.716E-01	5.510E-02	Zr95				9.040E-02	PCI/GWET	03/21/97

Client ID	Matrix	NAREL ID	Collect Start	Collect End	Ana. ID	QC	Procedure	Aliquot	Unit	Dry/Wet	Ash/Dry	Analyte	Conc.	Data Qualifiers	2*CSU	MDC	Unit	Res Date
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00378268W		PU	5.012E-01	GASH	2.860E-01	1.873E-01	Pu238	4.000E-03	UJ	5.900E-03	1.005E-02	PCI/GDRY	09/15/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00378268W		PU	5.012E-01	GASH	2.860E-01	1.873E-01	Pu239	2.000E-03	UJ	3.100E-03	5.209E-03	PCI/GDRY	09/15/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00378268W		PU	5.012E-01	GASH	2.860E-01	1.873E-01	Yield	8.460E+01		6.500E+00	%		09/15/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00378282U	MSD	PU	5.130E-01	GASH	2.860E-01	1.873E-01	Pu238	1.200E-03		8.400E-03	1.674E-02	PCI/GDRY	09/12/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00378282U	MSD	PU	5.130E-01	GASH	2.860E-01	1.873E-01	Pu239	6.690E-01		8.000E-02	7.094E-03	PCI/GDRY	09/12/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00378282U	MSD	PU	5.130E-01	GASH	2.860E-01	1.873E-01	Yield	7.710E+01		6.800E+00	%		09/12/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00380189U	MS	PU	5.011E-01	GASH	2.860E-01	1.873E-01	Pu238	7.100E-03		5.700E-03	8.222E-03	PCI/GDRY	10/14/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00380189U	MS	PU	5.011E-01	GASH	2.860E-01	1.873E-01	Pu239	5.900E-01		5.300E-02	3.010E-03	PCI/GDRY	10/14/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00380189U	MS	PU	5.011E-01	GASH	2.860E-01	1.873E-01	Yield	9.230E+01		6.100E+00	%		10/14/98
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00370456N		PU	5.004E-01	GASH	2.742E-01	1.918E-01	Pu238	8.300E-03	J	5.500E-03	5.736E-03	PCI/GDRY	04/14/98
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00370456N		PU	5.004E-01	GASH	2.742E-01	1.918E-01	Pu239	3.900E-03	UJ	3.900E-03	5.279E-03	PCI/GDRY	04/14/98
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00370456N		PU	5.004E-01	GASH	2.742E-01	1.918E-01	Yield	8.050E+01		5.900E+00	%		04/14/98
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00378285X	DUP	PU	5.007E-01	GASH	2.742E-01	1.918E-01	Pu238	3.300E-03		5.500E-03	9.751E-03	PCI/GDRY	09/12/98
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00378285X	DUP	PU	5.007E-01	GASH	2.742E-01	1.918E-01	Pu239	3.000E-04		2.000E-03	5.455E-03	PCI/GDRY	09/12/98
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00378285X	DUP	PU	5.007E-01	GASH	2.742E-01	1.918E-01	Yield	8.430E+01		6.500E+00	%		09/12/98
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00378288A		PU	5.011E-01	GASH	2.577E-01	2.040E-01	Pu238	5.300E-03	UJ	5.200E-03	6.967E-03	PCI/GDRY	09/12/98
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00378288A		PU	5.011E-01	GASH	2.577E-01	2.040E-01	Pu239	2.800E-03	UJ	3.300E-03	2.830E-03	PCI/GDRY	09/12/98
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00378288A		PU	5.011E-01	GASH	2.577E-01	2.040E-01	Yield	8.380E+01		6.400E+00	%		09/12/98
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00378291V		PU	5.008E-01	GASH	2.226E-01	8.372E-02	Pu238	9.000E-04	UJ	1.400E-03	2.388E-03	PCI/GDRY	09/12/98
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00378291V		PU	5.008E-01	GASH	2.226E-01	8.372E-02	Pu239	3.900E-04	UJ	7.800E-04	1.174E-03	PCI/GDRY	09/12/98
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00378291V		PU	5.008E-01	GASH	2.226E-01	8.372E-02	Yield	8.300E+01		6.400E+00	%		09/12/98
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00378292W		PU	5.009E-01	GASH	2.262E-01	9.939E-02	Pu238	1.300E-03	UJ	1.900E-03	3.114E-03	PCI/GDRY	09/12/98
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00378292W		PU	5.009E-01	GASH	2.262E-01	9.939E-02	Pu239	1.300E-04	UJ	8.700E-04	2.403E-03	PCI/GDRY	09/12/98
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00378292W		PU	5.009E-01	GASH	2.262E-01	9.939E-02	Yield	9.170E+01		6.700E+00	%		09/12/98
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00378293X		PU	5.012E-01	GASH	2.282E-01	9.147E-02	Pu238	1.900E-03	UJ	2.400E-03	4.017E-03	PCI/GDRY	09/12/98
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00378293X		PU	5.012E-01	GASH	2.282E-01	9.147E-02	Pu239	1.100E-04	UJ	7.500E-04	2.082E-03	PCI/GDRY	09/12/98
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00378293X		PU	5.012E-01	GASH	2.282E-01	9.147E-02	Yield	1.033E+02		7.400E+00	%		09/12/98
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00370657W		PU	5.008E-01	GASH	2.558E-01	4.909E-02	Pu238	7.800E-03	UJ	5.900E-03	8.330E-03	PCI/GDRY	04/14/98
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00370657W		PU	5.008E-01	GASH	2.558E-01	4.909E-02	Pu239	2.900E-03	J	2.600E-03	1.762E-03	PCI/GDRY	04/14/98
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00370657W		PU	5.008E-01	GASH	2.558E-01	4.909E-02	Yield	4.130E+01		4.800E+00	%		04/14/98
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00378295Z		PU	5.004E-01	GASH	2.623E-01	5.279E-02	Pu238	2.300E-03	UJ	1.900E-03	2.592E-03	PCI/GDRY	09/12/98
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00378295Z		PU	5.004E-01	GASH	2.623E-01	5.279E-02	Pu239	0.000E+00	UJ	6.000E-04	1.773E-03	PCI/GDRY	09/12/98
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00378295Z		PU	5.004E-01	GASH	2.623E-01	5.279E-02	Yield	7.630E+01		6.000E+00	%		09/12/98
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00378296A		PU	5.000E-01	GASH	2.716E-01	5.510E-02	Pu238	-2.000E-04	UJ	1.700E-03	3.618E-03	PCI/GDRY	09/12/98
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00378296A		PU	5.000E-01	GASH	2.716E-01	5.510E-02	Pu239	-2.400E-04	UJ	6.300E-04	2.045E-03	PCI/GDRY	09/12/98
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00378296A		PU	5.000E-01	GASH	2.716E-01	5.510E-02	Yield	8.240E+01		6.200E+00	%		09/12/98

Client ID	Matrix	NAREL ID	Collect Start	Collect End	Ana. ID	QC	Procedure	Aliquot	Unit	Dry/Wet	Ash/Dry	Analyte	Conc.	Data Qualifiers	2*CSU	MDC	Unit	Res Date
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361268K		SR	4.990E-01	GASH	2.860E-01	1.873E-01	Sr89	2.000E-01	U	5.500E+00	9.715E+00	PCI/GDRY	07/22/97
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361268K		SR	4.990E-01	GASH	2.860E-01	1.873E-01	Sr90	5.900E-01		1.800E-01	1.950E-01	PCI/GDRY	07/22/97
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361273G		SR	5.050E-01	GASH	2.742E-01	1.918E-01	Sr89	4.900E+00	U	4.700E+00	7.680E+00	PCI/GDRY	07/22/97
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00361273G		SR	5.050E-01	GASH	2.742E-01	1.918E-01	Sr90	-4.000E-02	U	1.300E-01	2.552E-01	PCI/GDRY	07/22/97
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00369981P	MS	SR	5.030E-01	GASH	2.742E-01	1.918E-01	Sr89	-6.000E+00		1.700E+01	2.987E+01	PCI/GDRY	07/22/97
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00369981P	MS	SR	5.030E-01	GASH	2.742E-01	1.918E-01	Sr90	8.640E+00		5.900E-01	2.183E-01	PCI/GDRY	07/22/97
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00369982Q	MSD	SR	5.020E-01	GASH	2.742E-01	1.918E-01	Sr89	9.000E+00		1.700E+01	2.765E+01	PCI/GDRY	07/22/97
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00369982Q	MSD	SR	5.020E-01	GASH	2.742E-01	1.918E-01	Sr90	8.280E+00		5.700E-01	2.550E-01	PCI/GDRY	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361278M		SR	4.990E-01	GASH	2.577E-01	2.040E-01	Sr89	2.000E-01	U	4.300E+00	7.934E+00	PCI/GDRY	07/22/97
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00361278M		SR	4.990E-01	GASH	2.577E-01	2.040E-01	Sr90	1.100E-01	U	1.100E-01	1.806E-01	PCI/GDRY	07/22/97
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361287N		SR	4.950E-01	GASH	2.226E-01	8.372E-02	Sr89	4.000E-01	U	2.000E+00	3.625E+00	PCI/GDRY	07/28/97
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00361287N		SR	4.950E-01	GASH	2.226E-01	8.372E-02	Sr90	1.790E-01		7.100E-02	8.835E-02	PCI/GDRY	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361292K		SR	5.000E-01	GASH	2.262E-01	9.939E-02	Sr89	1.400E+00	U	2.000E+00	3.353E+00	PCI/GDRY	07/28/97
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00361292K		SR	5.000E-01	GASH	2.262E-01	9.939E-02	Sr90	-2.000E-03	U	6.200E-02	1.154E-01	PCI/GDRY	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361297Q		SR	4.980E-01	GASH	2.282E-01	9.147E-02	Sr89	1.200E+00	U	2.400E+00	4.207E+00	PCI/GDRY	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361297Q		SR	4.980E-01	GASH	2.282E-01	9.147E-02	Sr90	-1.400E-02	U	7.800E-02	1.451E-01	PCI/GDRY	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00369983R	DUP	SR	5.050E-01	GASH	2.282E-01	9.147E-02	Sr89	-1.400E+00		2.500E+00	4.913E+00	PCI/GDRY	07/28/97
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00369983R	DUP	SR	5.050E-01	GASH	2.282E-01	9.147E-02	Sr90	6.100E-02		8.200E-02	1.471E-01	PCI/GDRY	07/28/97
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361311V		SR	5.010E-01	GASH	2.558E-01	4.909E-02	Sr89	4.300E+00	U	7.300E+00	1.288E+01	PCI/GDRY	03/21/97
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00361311V		SR	5.010E-01	GASH	2.558E-01	4.909E-02	Sr90	-7.000E-03	U	4.300E-02	8.078E-02	PCI/GDRY	03/21/97
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361316A		SR	5.010E-01	GASH	2.623E-01	5.279E-02	Sr89	4.900E+00	U	8.700E+00	1.459E+01	PCI/GDRY	03/21/97
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361316A		SR	5.010E-01	GASH	2.623E-01	5.279E-02	Sr90	-9.000E-03	U	5.000E-02	9.079E-02	PCI/GDRY	03/21/97
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00369862H		SR	5.020E-01	GASH	2.716E-01	5.510E-02	Sr89	-2.600E-02	U	5.000E-02	9.799E-02	PCI/GDRY	03/21/98
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00369862H		SR	5.020E-01	GASH	2.716E-01	5.510E-02	Sr90	3.800E-02	U	4.300E-02	7.473E-02	PCI/GDRY	03/21/98

Client ID	Matrix	NAREL ID	Collect Start	Collect End	Ana. ID	QC	Procedure	Aliquot	Unit	Dry/Wet	Ash/Dry	Analyte	Conc.	Data Qualifiers	2*CSU	MDC	Unit	Res Date
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361270D		U	5.022E-01	GASH	2.860E-01	1.873E-01	U234	1.070E-01		2.000E-02	6.768E-03	PCI/GDRY	04/08/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361270D		U	5.022E-01	GASH	2.860E-01	1.873E-01	U235	3.400E-02		1.200E-02	7.278E-03	PCI/GDRY	04/08/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361270D		U	5.022E-01	GASH	2.860E-01	1.873E-01	U238	8.100E-02		1.700E-02	6.768E-03	PCI/GDRY	04/08/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00361270D		U	5.022E-01	GASH	2.860E-01	1.873E-01	Yield	9.490E+01		5.900E+00		%	04/08/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00369992T	MS	U	4.989E-01	GASH	2.860E-01	1.873E-01	U234	4.100E-01		4.400E-02	5.322E-03	PCI/GDRY	04/08/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00369992T	MS	U	4.989E-01	GASH	2.860E-01	1.873E-01	U235	7.400E-02		1.700E-02	6.373E-03	PCI/GDRY	04/08/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00369992T	MS	U	4.989E-01	GASH	2.860E-01	1.873E-01	U238	3.990E-01		4.300E-02	4.065E-03	PCI/GDRY	04/08/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00369992T	MS	U	4.989E-01	GASH	2.860E-01	1.873E-01	Yield	9.260E+01		5.800E+00		%	04/08/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00369993U	MSD	U	5.020E-01	GASH	2.860E-01	1.873E-01	U234	4.980E-01		4.700E-02	6.703E-03	PCI/GDRY	04/08/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00369993U	MSD	U	5.020E-01	GASH	2.860E-01	1.873E-01	U235	6.800E-02		1.500E-02	5.976E-03	PCI/GDRY	04/08/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00369993U	MSD	U	5.020E-01	GASH	2.860E-01	1.873E-01	U238	4.640E-01		4.500E-02	7.369E-03	PCI/GDRY	04/08/98
97304975	FISH	97.08234R	07/22/1997 00:00	07/22/1997 00:00	00369993U	MSD	U	5.020E-01	GASH	2.860E-01	1.873E-01	Yield	8.790E+01		5.200E+00		%	04/08/98
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00370457P		U	5.008E-01	GASH	2.742E-01	1.918E-01	U234	1.720E-01		2.800E-02	5.624E-03	PCI/GDRY	04/14/98
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00370457P		U	5.008E-01	GASH	2.742E-01	1.918E-01	U235	4.700E-02		1.500E-02	9.241E-03	PCI/GDRY	04/14/98
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00370457P		U	5.008E-01	GASH	2.742E-01	1.918E-01	U238	8.300E-02		1.900E-02	8.113E-03	PCI/GDRY	04/14/98
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00370457P		U	5.008E-01	GASH	2.742E-01	1.918E-01	Yield	8.420E+01		5.500E+00		%	04/14/98
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00370458Q	DUP	U	4.995E-01	GASH	2.742E-01	1.918E-01	U234	1.520E-01		2.500E-02	4.488E-03	PCI/GDRY	04/14/98
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00370458Q	DUP	U	4.995E-01	GASH	2.742E-01	1.918E-01	U235	4.000E-02		1.300E-02	3.105E-03	PCI/GDRY	04/14/98
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00370458Q	DUP	U	4.995E-01	GASH	2.742E-01	1.918E-01	U238	1.000E-01		2.000E-02	4.488E-03	PCI/GDRY	04/14/98
97304976	FISH	97.08235T	07/22/1997 00:00	07/22/1997 00:00	00370458Q	DUP	U	4.995E-01	GASH	2.742E-01	1.918E-01	Yield	8.710E+01		5.600E+00		%	04/14/98
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00370464N		U	5.026E-01	GASH	2.577E-01	2.040E-01	U234	1.430E-01		2.500E-02	8.741E-03	PCI/GDRY	04/14/98
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00370464N		U	5.026E-01	GASH	2.577E-01	2.040E-01	U235	3.600E-02		1.300E-02	3.278E-03	PCI/GDRY	04/14/98
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00370464N		U	5.026E-01	GASH	2.577E-01	2.040E-01	U238	7.900E-02		1.800E-02	4.739E-03	PCI/GDRY	04/14/98
97304977	FISH	97.08236U	07/22/1997 00:00	07/22/1997 00:00	00370464N		U	5.026E-01	GASH	2.577E-01	2.040E-01	Yield	9.670E+01		6.200E+00		%	04/14/98
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00370465P		U	5.016E-01	GASH	2.226E-01	8.372E-02	U234	1.570E-02		4.700E-03	2.183E-03	PCI/GDRY	04/14/98
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00370465P		U	5.016E-01	GASH	2.226E-01	8.372E-02	U235	2.600E-03	U	2.200E-03	2.840E-03	PCI/GDRY	04/14/98
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00370465P		U	5.016E-01	GASH	2.226E-01	8.372E-02	U238	6.300E-03		2.900E-03	1.667E-03	PCI/GDRY	04/14/98
97310800	FISH	97.08240P	07/28/1997 00:00	07/28/1997 00:00	00370465P		U	5.016E-01	GASH	2.226E-01	8.372E-02	Yield	1.002E+02		6.100E+00		%	04/14/98
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00370466Q		U	5.042E-01	GASH	2.262E-01	9.939E-02	U234	1.970E-02		5.800E-03	2.100E-03	PCI/GDRY	04/14/98
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00370466Q		U	5.042E-01	GASH	2.262E-01	9.939E-02	U235	4.200E-03		3.100E-03	3.577E-03	PCI/GDRY	04/14/98
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00370466Q		U	5.042E-01	GASH	2.262E-01	9.939E-02	U238	7.500E-03		3.600E-03	2.100E-03	PCI/GDRY	04/14/98
97310801	FISH	97.08241Q	07/28/1997 00:00	07/28/1997 00:00	00370466Q		U	5.042E-01	GASH	2.262E-01	9.939E-02	Yield	9.850E+01		6.100E+00		%	04/14/98
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361299T		U	5.007E-01	GASH	2.282E-01	9.147E-02	U234	1.180E-02		3.600E-03	1.751E-03	PCI/GDRY	04/08/98
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361299T		U	5.007E-01	GASH	2.282E-01	9.147E-02	U235	1.200E-03		1.200E-03	9.251E-04	PCI/GDRY	04/08/98
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361299T		U	5.007E-01	GASH	2.282E-01	9.147E-02	U238	5.600E-03		2.400E-03	1.337E-03	PCI/GDRY	04/08/98
97310802	FISH	97.08242R	07/28/1997 00:00	07/28/1997 00:00	00361299T		U	5.007E-01	GASH	2.282E-01	9.147E-02	Yield	1.054E+02		5.800E+00		%	04/08/98
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00371875J		U	4.995E-01	GASH	2.558E-01	4.909E-02	U234	2.760E-02		5.200E-03	1.098E-03	PCI/GDRY	05/08/98
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00371875J		U	4.995E-01	GASH	2.558E-01	4.909E-02	U235	5.500E-03		2.400E-03	1.315E-03	PCI/GDRY	05/08/98
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00371875J		U	4.995E-01	GASH	2.558E-01	4.909E-02	U238	1.900E-02		4.200E-03	1.098E-03	PCI/GDRY	05/08/98
97130800	FISH	97.08249Z	03/21/1997 00:00	03/21/1997 00:00	00371875J		U	4.995E-01	GASH	2.558E-01	4.909E-02	Yield	6.740E+01		4.300E+00		%	05/08/98
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361318C		U	5.009E-01	GASH	2.623E-01	5.279E-02	U234	3.170E-02		4.800E-03	8.094E-04	PCI/GDRY	04/08/98
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361318C		U	5.009E-01	GASH	2.623E-01	5.279E-02	U235	8.400E-03		2.500E-03	5.600E-04	PCI/GDRY	04/08/98
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361318C		U	5.009E-01	GASH	2.623E-01	5.279E-02	U238	1.430E-02		3.100E-03	8.094E-04	PCI/GDRY	04/08/98
97130801	FISH	97.08250R	03/21/1997 00:00	03/21/1997 00:00	00361318C		U	5.009E-01	GASH	2.623E-01	5.279E-02	Yield	9.720E+01		5.400E+00		%	04/08/98
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00369864K		U	4.998E-01	GASH	2.716E-01	5.510E-02	U234	1.460E-02		3.100E-03	8.032E-04	PCI/GDRY	04/08/98
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00369864K		U	4.998E-01	GASH	2.716E-01	5.510E-02	U235	1.230E-03		9.900E-04	9.620E-04	PCI/GDRY	04/08/98
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00369864K		U	4.998E-01	GASH	2.716E-01	5.510E-02	U238	9.800E-03		2.500E-03	8.032E-04	PCI/GDRY	04/08/98
97130802	FISH	97.08251T	03/21/1997 00:00	03/21/1997 00:00	00369864K		U	4.998E-01	GASH	2.716E-01	5.510E-02	Yield	1.031E+02		5.700E+00		%	04/08/98

Client ID	Matrix	NAREL ID	Collect Start	Collect End	Ana. ID	QC	Procedure	Aliquot	Unit	Dry/Wet	Ash/Dry	Analyte	Conc.	2*CSU	MDC	Unit	Res Date
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	00383334X		ALPBET	1.006E-01	GASH	3.343E-01	8.735E-02	Alpha	-1.400E-01	1.400E-01	5.550E-01	PCI/GDRY	01/22/99
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	00383334X		ALPBET	1.006E-01	GASH	3.343E-01	8.735E-02	Beta	7.320E+00	5.500E-01	3.227E-01	PCI/GDRY	01/22/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00383338B		ALPBET	1.002E-01	GASH	2.558E-01	1.821E-01	Alpha	1.180E+00	9.600E-01	1.273E+00	PCI/GDRY	01/22/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00383338B		ALPBET	1.002E-01	GASH	2.558E-01	1.821E-01	Beta	1.100E+01	1.000E+00	7.469E-01	PCI/GDRY	01/22/99
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00383342X		ALPBET	1.004E-01	GASH	2.490E-01	1.746E-01	Alpha	1.160E+00	8.800E-01	1.103E+00	PCI/GDRY	01/22/99
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00383342X		ALPBET	1.004E-01	GASH	2.490E-01	1.746E-01	Beta	1.190E+01	1.000E+00	6.731E-01	PCI/GDRY	01/22/99
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00383346B		ALPBET	9.760E-02	GASH	3.175E-01	6.278E-02	Alpha	6.000E-02	3.400E-01	6.707E-01	PCI/GDRY	01/22/99
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00383346B		ALPBET	9.760E-02	GASH	3.175E-01	6.278E-02	Beta	1.642E+01	7.000E-01	2.566E-01	PCI/GDRY	01/22/99
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00383351Y		ALPBET	1.026E-01	GASH	2.596E-01	4.283E-02	Alpha	2.300E-01	1.900E-01	2.495E-01	PCI/GDRY	01/22/99
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00383351Y		ALPBET	1.026E-01	GASH	2.596E-01	4.283E-02	Beta	1.154E+01	4.600E-01	1.546E-01	PCI/GDRY	01/22/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00383355C		ALPBET	9.950E-02	GASH	2.593E-01	4.248E-02	Alpha	1.800E-01	1.700E-01	2.408E-01	PCI/GDRY	01/22/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00383355C		ALPBET	9.950E-02	GASH	2.593E-01	4.248E-02	Beta	1.174E+01	4.700E-01	1.546E-01	PCI/GDRY	01/22/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00383356D		ALPBET	9.880E-02	GASH	2.593E-01	4.248E-02	Alpha	1.300E-01	1.600E-01	2.457E-01	PCI/GDRY	01/22/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00383356D	DUP	ALPBET	9.880E-02	GASH	2.593E-01	4.248E-02	Beta	1.119E+01	4.700E-01	1.630E-01	PCI/GDRY	01/22/99
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00383360Z		ALPBET	1.052E-01	GASH	3.376E-01	3.369E-02	Alpha	1.300E-01	1.400E-01	2.123E-01	PCI/GDRY	01/22/99
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00383360Z		ALPBET	1.052E-01	GASH	3.376E-01	3.369E-02	Beta	8.070E+00	3.400E-01	1.215E-01	PCI/GDRY	01/22/99
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00383364D		ALPBET	1.051E-01	GASH	3.057E-01	3.872E-02	Alpha	1.100E-01	1.600E-01	2.684E-01	PCI/GDRY	01/22/99
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00383364D		ALPBET	1.051E-01	GASH	3.057E-01	3.872E-02	Beta	9.100E+00	4.000E-01	1.503E-01	PCI/GDRY	01/22/99
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	00383368H		ALPBET	1.025E-01	GASH	3.015E-01	7.712E-02	Alpha	1.000E-02	2.000E-01	4.853E-01	PCI/GDRY	01/22/99
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	00383368H		ALPBET	1.025E-01	GASH	3.015E-01	7.712E-02	Beta	1.030E+01	6.100E-01	2.850E-01	PCI/GDRY	01/22/99
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	383373		ALPBET	1.023E-01	GASH	2.490E-01	7.707E-02	Alpha	-2.700E-01	3.100E-01	8.164E-01	PCI/GDRY	01/22/99
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	383373		ALPBET	1.023E-01	GASH	2.490E-01	7.707E-02	Beta	7.830E+00	5.400E-01	3.010E-01	PCI/GDRY	01/22/99
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00383377J		ALPBET	1.093E-01	GASH	2.663E-01	3.811E-02	Alpha	3.200E-01	2.000E-01	2.194E-01	PCI/GDRY	01/22/99
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00383377J		ALPBET	1.093E-01	GASH	2.663E-01	3.811E-02	Beta	1.074E+01	4.100E-01	1.317E-01	PCI/GDRY	01/22/99
98024003	FISH	98.00656H	01/08/1998 00:00	01/08/1998 00:00	383381		ALPBET	1.057E-01	GASH	2.556E-01	4.239E-02	Alpha	6.000E-01	2.700E-01	2.377E-01	PCI/GDRY	01/22/99
98024003	FISH	98.00656H	01/08/1998 00:00	01/08/1998 00:00	383381		ALPBET	1.057E-01	GASH	2.556E-01	4.239E-02	Beta	1.175E+01	4.600E-01	1.520E-01	PCI/GDRY	01/22/99
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00383386K		ALPBET	1.010E-01	GASH	3.236E-01	9.222E-02	Alpha	1.400E-01	2.800E-01	5.314E-01	PCI/GDRY	01/22/99
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00383386K		ALPBET	1.010E-01	GASH	3.236E-01	9.222E-02	Beta	7.950E+00	6.000E-01	3.451E-01	PCI/GDRY	01/22/99
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00383390F		ALPBET	1.012E-01	GASH	3.204E-01	9.153E-02	Alpha	1.400E-01	3.200E-01	6.209E-01	PCI/GDRY	01/22/99
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00383390F		ALPBET	1.012E-01	GASH	3.204E-01	9.153E-02	Beta	9.320E+00	6.400E-01	3.476E-01	PCI/GDRY	01/22/99

														Data					
Client ID	Matrix	NAREL ID	Collect Start	Collect End	Ana. ID	QC	Procedure	Aliquot	Unit	Dry/Wet	Ash/Dry	Analyte	Conc.	Qualifiers	2*CSU	MDC	Unit	Res Date	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Am241				3.090E-02	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Ba140				5.690E-01	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Be7				9.170E-02	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Ce141				2.310E-02	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Ce144				9.950E-02	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Co58				1.070E-02	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Co60				6.640E-03	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Cs134				6.630E-03	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Cs137	6.700E-03		2.600E-03		PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Eu152				1.500E-02	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Eu154				3.480E-02	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Fe59				3.640E-02	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Il31				1.210E+00	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	K40	2.060E+00		8.200E-02		PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	La140				2.310E-02	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Mn54				6.230E-03	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Mo99				3.420E+00	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Na22				7.140E-03	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Nb95				1.030E-02	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Pr144				4.590E-01	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Ra226				9.850E-02	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Ra228				2.250E-02	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Ru103				1.550E-02	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Ru106				5.330E-02	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Sb125				3.360E-02	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Zn65				1.810E-02	PCI/GWET	12/09/97	
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	367157		GAMMA	9.580E+02	GWET	3.343E-01	8.735E-02	Zr95				1.910E-02	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Am241				3.130E-02	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Ba140				5.220E-01	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Be7				8.640E-02	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Ce141				2.420E-02	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Ce144				2.970E-02	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Co58				9.510E-03	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Co60				6.080E-03	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Cs134				6.390E-03	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Cs137	4.800E-03		2.500E-03		PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Eu152				1.430E-02	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Eu154				3.720E-02	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Fe59				3.580E-02	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Il31				1.110E+00	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	K40	2.710E+00		9.300E-02		PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	La140				2.150E-02	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Mn54				6.150E-03	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Mo99				3.810E+00	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Na22				8.120E-03	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Nb95				1.030E-02	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Pb212	1.620E-02		6.700E-03		PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Pr144				4.140E-01	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Ra226				9.920E-02	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Ra228				2.050E-02	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Ru103				1.490E-02	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Ru106				5.390E-02	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Sb125				3.260E-02	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Ti208	3.800E-03	U	4.200E-03		PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Zn65				2.000E-02	PCI/GWET	12/09/97	
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00367158F		GAMMA	1.040E+03	GWET	2.558E-01	1.821E-01	Zr95				1.900E-02	PCI/GWET	12/09/97	
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G		GAMMA	1.020E+03	GWET	2.490E-01	1.746E-01	Am241				2.940E-02	PCI/GWET	12/10/97	
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G		GAMMA	1.020E+03	GWET	2.490E-01	1.746E-01	Ba140				4.930E-01	PCI/GWET	12/10/97	
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G		GAMMA	1.020E+											

97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G	GAMMA	1.020E+03	GWET	2.490E-01	1.746E-01	K40	2.840E+00	9.100E-02	PCI/GWET	12/10/97
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G	GAMMA	1.020E+03	GWET	2.490E-01	1.746E-01	La140		2.290E-02	PCI/GWET	12/10/97
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G	GAMMA	1.020E+03	GWET	2.490E-01	1.746E-01	Mn54		6.740E-03	PCI/GWET	12/10/97
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G	GAMMA	1.020E+03	GWET	2.490E-01	1.746E-01	Mo99		3.520E+00	PCI/GWET	12/10/97
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G	GAMMA	1.020E+03	GWET	2.490E-01	1.746E-01	Na22		7.220E-03	PCI/GWET	12/10/97
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G	GAMMA	1.020E+03	GWET	2.490E-01	1.746E-01	Nb95		1.120E-02	PCI/GWET	12/10/97
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G	GAMMA	1.020E+03	GWET	2.490E-01	1.746E-01	Pb212	1.950E-02	6.800E-03	PCI/GWET	12/10/97
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G	GAMMA	1.020E+03	GWET	2.490E-01	1.746E-01	Pb214	1.510E-02	6.200E-03	PCI/GWET	12/10/97
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G	GAMMA	1.020E+03	GWET	2.490E-01	1.746E-01	Pr144		4.730E-01	PCI/GWET	12/10/97
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G	GAMMA	1.020E+03	GWET	2.490E-01	1.746E-01	Ra226		9.660E-02	PCI/GWET	12/10/97
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G	GAMMA	1.020E+03	GWET	2.490E-01	1.746E-01	Ra228		2.100E-02	PCI/GWET	12/10/97
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G	GAMMA	1.020E+03	GWET	2.490E-01	1.746E-01	Ru103		1.400E-02	PCI/GWET	12/10/97
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G	GAMMA	1.020E+03	GWET	2.490E-01	1.746E-01	Ru106		5.910E-02	PCI/GWET	12/10/97
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G	GAMMA	1.020E+03	GWET	2.490E-01	1.746E-01	Sb125		3.180E-02	PCI/GWET	12/10/97
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G	GAMMA	1.020E+03	GWET	2.490E-01	1.746E-01	Ti208	7.600E-03	3.600E-03	PCI/GWET	12/10/97
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G	GAMMA	1.020E+03	GWET	2.490E-01	1.746E-01	Zn65		2.250E-02	PCI/GWET	12/10/97
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00367159G	GAMMA	1.020E+03	GWET	2.490E-01	1.746E-01	Zr95		1.910E-02	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Am241		2.340E-02	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Ba140		5.060E-01	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Be7		8.800E-02	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Ce141		2.000E-02	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Ce144		2.700E-02	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Co58		1.010E-02	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Co60		7.750E-03	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Cs134		6.240E-03	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Cs137	1.050E-02	2.700E-03	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Eu152		1.340E-02	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Eu154		4.140E-02	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Fe59		3.580E-02	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	I131		9.500E-01	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	K40	2.820E+00	9.100E-02	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	La140		2.370E-02	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Mn54		6.390E-03	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Mo99		3.220E+00	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Na22		9.300E-03	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Nb95		1.030E-02	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Pb212	3.500E-03	U 5.000E-03	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Pr144		4.530E-01	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Ra226		8.450E-02	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Ra228		2.130E-02	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Ru103		1.520E-02	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Ru106		5.590E-02	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Sb125		3.150E-02	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Zn65		2.100E-02	PCI/GWET	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00367160Z	GAMMA	9.760E+02	GWET	3.175E-01	6.278E-02	Zr95		1.840E-02	PCI/GWET	12/10/97
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00367161A	GAMMA	8.860E+02	GWET	2.596E-01	4.283E-02	Am241		2.320E-02	PCI/GWET	04/02/97
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00367161A	GAMMA	8.860E+02	GWET	2.596E-01	4.283E-02	Ba140		1.630E+01	PCI/GWET	04/02/97
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00367161A	GAMMA	8.860E+02	GWET	2.596E-01	4.283E-02	Be7		2.120E+00	PCI/GWET	04/02/97
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00367161A	GAMMA	8.860E+02	GWET	2.596E-01	4.283E-02	Ce141		4.440E+00	PCI/GWET	04/02/97
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00367161A	GAMMA	8.860E+02	GWET	2.596E-01	4.283E-02	Ce144		4.850E-02	PCI/GWET	04/02/97
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00367161A	GAMMA	8.860E+02	GWET	2.596E-01	4.283E-02	Co58		1.060E-01	PCI/GWET	04/02/97
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00367161A	GAMMA	8.860E+02	GWET	2.596E-01	4.283E-02	Co60		7.660E-03	PCI/GWET	04/02/97
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00367161A	GAMMA	8.860E+02	GWET	2.596E-01	4.283E-02	Cs134		6.610E-03	PCI/GWET	04/02/97
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00367161A	GAMMA	8.860E+02	GWET	2.596E-01	4.283E-02	Cs137	5.700E-03	2.500E-03	PCI/GWET	04/02/97
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00367161A	GAMMA	8.860E+02	GWET	2.596E-01	4.283E-02	Eu152		1.270E-02	PCI/GWET	04/02/97
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00367161A	GAMMA	8.860E+02	GWET	2.596E-01	4.283E-02	Eu154		3.660E-02	PCI/GWET	04/02/97
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00367161A	GAMMA	8.860E+02	GWET	2.596E-01	4.283E-02	Fe59		1.570E+00	PCI/GWET	04/02/97
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00367161A	GAMMA	8.860E+02	GWET	2.596E-01	4.283E-02	I131		4.030E+00	PCI/GWET	04/02/97
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00367161A	GAMMA	8.860E+02	GWET	2.596E-01	4.283E-02	K40	3.650E+00	9.200E-02	PCI/GWET	04/02/97
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00367161A	GAMMA	8.860E+02	GWET	2.596E-01	4.283E-02	La140		1.960E-02	PCI/GWET	04/02/97
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00367161A	GAMMA	8.860E+02	GWET	2.596E-01	4.283E-02	Mn54		9.780E-03	PCI/GWET	04/02/97
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00367161A	GAMMA	8.860E+02	GWET	2.596E-01	4.283E-02	Mo99		1.730E+00	PCI/GWET	04/02/97
97140800	FISH	98.00649J	04/02/199												

97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Ba140			2.770E+01	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Be7			3.870E+00	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Ce141			6.440E+00	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Ce144			7.530E-02	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Co58			2.020E-01	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Co60			1.630E-02	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Cs134			1.290E-02	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Cs137	4.500E-03	4.400E-03		PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Eu152			2.140E-02	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Eu154			7.620E-02	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Fe59			3.400E+00	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	I131			6.960E+00	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	K40	3.680E+00	2.000E-01		PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	La140			4.240E-02	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Mn54			2.150E-02	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Mo99			4.720E+00	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Na22			1.920E-02	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Nb95			3.070E-01	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Pr144			1.590E+00	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Ra226			1.270E-01	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Ra228			4.450E-02	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Ru103			1.860E+00	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Ru106			1.460E-01	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Sb125			6.730E-02	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	TI208	6.000E-03	U	6.300E-03	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Zn65			7.290E-02	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367162B	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Zr95			4.870E-01	PCI/GWET	04/02/97	
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Am241			3.560E-02	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Ba140			2.810E+01	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Be7			3.580E+00	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Ce141			6.140E+00	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Ce144			6.710E-02	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Co58			2.010E-01	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Co60			1.490E-02	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Cs134			1.010E-02	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Cs137	7.200E-03	4.500E-03		PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Eu152			2.100E-02	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Eu154			6.360E-02	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Fe59			3.500E+00	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	I131			6.850E+00	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	K40	3.370E+00	1.600E-01		PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	La140			3.450E-02	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Mn54			2.120E-02	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Mo99			4.300E+00	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Na22			1.710E-02	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Nb95			2.700E-01	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Pr144			1.300E+00	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Ra226			1.160E-01	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Ra228			3.910E-02	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Ru103			2.090E+00	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Ru106			1.460E-01	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Sb125			5.770E-02	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Zn65			6.990E-02	PCI/GWET	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00367185J	DUP	GAMMA	8.580E+02	GWET	2.593E-01	4.248E-02	Zr95			4.800E-01	PCI/GWET	04/02/97
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00367163C	GAMMA	1.030E+03	GWET	3.376E-01	3.369E-02	Am241			2.950E-02	PCI/GWET	08/05/97	
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00367163C	GAMMA	1.030E+03	GWET	3.376E-01	3.369E-02	Ba140			2.270E+01	PCI/GWET	08/05/97	
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00367163C	GAMMA	1.030E+03	GWET	3.376E-01	3.369E-02	Be7			5.990E-01	PCI/GWET	08/05/97	
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00367163C	GAMMA	1.030E+03	GWET	3.376E-01	3.369E-02	Ce141			3.430E-01	PCI/GWET	08/05/97	
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00367163C	GAMMA	1.030E+03	GWET	3.376E-01	3.369E-02	Ce144			4.030E-02	PCI/GWET	08/05/97	
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00367163C	GAMMA	1.030E+03	GWET	3.376E-01	3.369E-02	Co58			4.980E-02	PCI/GWET	08/05/97	
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00													

97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00367163C	GAMMA	1.030E+03	GWET	3.376E-01	3.369E-02	Pr144				7.880E-01	PCI/GWET	08/05/97
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00367163C	GAMMA	1.030E+03	GWET	3.376E-01	3.369E-02	Ra226				1.040E-01	PCI/GWET	08/05/97
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00367163C	GAMMA	1.030E+03	GWET	3.376E-01	3.369E-02	Ra228				3.080E-02	PCI/GWET	08/05/97
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00367163C	GAMMA	1.030E+03	GWET	3.376E-01	3.369E-02	Ru103				1.870E-01	PCI/GWET	08/05/97
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00367163C	GAMMA	1.030E+03	GWET	3.376E-01	3.369E-02	Ru106				8.430E-02	PCI/GWET	08/05/97
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00367163C	GAMMA	1.030E+03	GWET	3.376E-01	3.369E-02	Sb125				4.660E-02	PCI/GWET	08/05/97
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00367163C	GAMMA	1.030E+03	GWET	3.376E-01	3.369E-02	Zn65				3.960E-02	PCI/GWET	08/05/97
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00367163C	GAMMA	1.030E+03	GWET	3.376E-01	3.369E-02	Zr95				1.200E-01	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Am241				2.700E-02	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Ba140				2.260E+01	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Be7				5.120E-01	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Ce141				3.760E-01	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Ce144				4.490E-02	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Co58				4.130E-02	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Co60				9.510E-03	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Cs134				7.390E-03	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Cs137	4.500E-03	3.200E-03			PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Eu152				1.500E-02	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Eu154				4.740E-02	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Fe59				2.910E-01	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	I131				5.240E+00	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	K40	3.220E+00	1.100E-01			PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	La140				2.470E-02	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Mn54				9.930E-03	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Mo99				4.100E+00	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Na22				1.050E-02	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Nb95				4.360E-02	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Pr144				7.670E-01	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Ra226				9.460E-02	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Ra228				2.410E-02	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Ru103				1.530E-01	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Ru106				7.930E-02	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Sb125				3.730E-02	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Zn65				3.370E-02	PCI/GWET	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00367164D	GAMMA	9.270E+02	GWET	3.057E-01	3.872E-02	Zr95				8.660E-02	PCI/GWET	08/05/97
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Am241				2.730E-02	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Ba140				1.120E-01	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Be7				6.140E-02	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Ce141				1.180E-02	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Ce144				2.510E-02	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Co58				7.450E-03	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Co60				6.450E-03	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Cs134				5.890E-03	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Cs137	2.700E-03	2.200E-03			PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Eu152				1.390E-02	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Eu154				3.600E-02	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Fe59				2.010E-02	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	I131				1.040E-01	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	K40	1.910E+00	7.400E-02			PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	La140				2.220E-02	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Mn54				5.600E-03	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Mo99				3.250E+00	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Na22				7.740E-03	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Nb95				6.890E-03	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Pr144				3.810E-01	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Ra226				9.240E-02	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Ra228				1.840E-02	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Ru103				8.640E-03	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Ru106				5.220E-02	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03	GWET	3.015E-01	7.712E-02	Sb125				3.040E-02	PCI/GWET	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	367165	GAMMA	1.050E+03										

98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00367166F	GAMMA	1.040E+03	GWET	2.490E-01	7.707E-02	Fe59				2.130E-02	PCI/GWET	01/07/98
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00367166F	GAMMA	1.040E+03	GWET	2.490E-01	7.707E-02	I131				8.910E-02	PCI/GWET	01/07/98
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00367166F	GAMMA	1.040E+03	GWET	2.490E-01	7.707E-02	K40	2.120E+00	8.600E-02			PCI/GWET	01/07/98
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00367166F	GAMMA	1.040E+03	GWET	2.490E-01	7.707E-02	La140				1.860E-02	PCI/GWET	01/07/98
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00367166F	GAMMA	1.040E+03	GWET	2.490E-01	7.707E-02	Mn54				5.950E-03	PCI/GWET	01/07/98
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00367166F	GAMMA	1.040E+03	GWET	2.490E-01	7.707E-02	Mo99				3.780E+00	PCI/GWET	01/07/98
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00367166F	GAMMA	1.040E+03	GWET	2.490E-01	7.707E-02	Na22				7.690E-03	PCI/GWET	01/07/98
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00367166F	GAMMA	1.040E+03	GWET	2.490E-01	7.707E-02	Nb95				7.700E-03	PCI/GWET	01/07/98
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00367166F	GAMMA	1.040E+03	GWET	2.490E-01	7.707E-02	Pr144				3.640E-01	PCI/GWET	01/07/98
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00367166F	GAMMA	1.040E+03	GWET	2.490E-01	7.707E-02	Ra226	4.700E-02	UJ	7.800E-02		PCI/GWET	01/07/98
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00367166F	GAMMA	1.040E+03	GWET	2.490E-01	7.707E-02	Ra228				1.740E-02	PCI/GWET	01/07/98
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00367166F	GAMMA	1.040E+03	GWET	2.490E-01	7.707E-02	Ru103				7.790E-03	PCI/GWET	01/07/98
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00367166F	GAMMA	1.040E+03	GWET	2.490E-01	7.707E-02	Ru106				5.210E-02	PCI/GWET	01/07/98
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00367166F	GAMMA	1.040E+03	GWET	2.490E-01	7.707E-02	Sb125				2.980E-02	PCI/GWET	01/07/98
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00367166F	GAMMA	1.040E+03	GWET	2.490E-01	7.707E-02	Zn65				1.790E-02	PCI/GWET	01/07/98
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00367166F	GAMMA	1.040E+03	GWET	2.490E-01	7.707E-02	Zr95				1.310E-02	PCI/GWET	01/07/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Am241				2.240E-02	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Ba140				2.350E-01	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Be7				9.500E-02	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Ce141				1.600E-02	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Ce144				3.320E-02	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Co58				1.380E-02	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Co60				1.170E-02	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Cs134				8.700E-03	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Cs137	1.050E-02	3.900E-03			PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Eu152				1.730E-02	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Eu154				5.790E-02	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Fe59				4.600E-02	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	I131				2.410E-01	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	K40	3.020E+00	1.600E-01			PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	La140				3.810E-02	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Mn54				9.590E-03	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Mo99				3.960E+00	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Na22				1.410E-02	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Nb95				1.350E-02	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Pr144				6.610E-01	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Ra226				1.040E-01	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Ra228				3.340E-02	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Ru103				1.440E-02	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Ru106				8.130E-02	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Sb125				4.470E-02	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Zn65				2.780E-02	PCI/GWET	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00367678B	GAMMA	1.020E+03	GWET	2.663E-01	3.811E-02	Zr95				2.250E-02	PCI/GWET	01/08/98
98024003	FISH	98.00656H	Q 01/08/1998 00:00	01/08/1998 00:00	00367168H	GAMMA	1.040E+03	GWET	2.556E-01	4.239E-02	Am241				2.190E-02	PCI/GWET	01/08/98
98024003	FISH	98.00656H	Q 01/08/1998 00:00	01/08/1998 00:00	00367168H	GAMMA	1.040E+03	GWET	2.556E-01	4.239E-02	Ba140				1.070E-01	PCI/GWET	01/08/98
98024003	FISH	98.00656H	Q 01/08/1998 00:00	01/08/1998 00:00	00367168H	GAMMA	1.040E+03	GWET	2.556E-01	4.239E-02	Be7				5.780E-02	PCI/GWET	01/08/98
98024003	FISH	98.00656H	Q 01/08/1998 00:00	01/08/1998 00:00	00367168H	GAMMA	1.040E+03	GWET	2.556E-01	4.239E-02	Ce141				1.080E-02	PCI/GWET	01/08/98
98024003	FISH	98.00656H	Q 01/08/1998 00:00	01/08/1998 00:00	00367168H	GAMMA	1.040E+03	GWET	2.556E-01	4.239E-02	Ce144				2.340E-02	PCI/GWET	01/08/98
98024003	FISH	98.00656H	Q 01/08/1998 00:00	01/08/1998 00:00	00367168H	GAMMA	1.040E+03	GWET	2.556E-01	4.239E-02	Co58				7.000E-03	PCI/GWET	01/08/98
98024003	FISH	98.00656H	Q 01/08/1998 00:00	01/08/1998 00:00	00367168H	GAMMA	1.040E+03	GWET	2.556E-01	4.239E-02	Co60				7.870E-03	PCI/GWET	01/08/98
98024003	FISH	98.00656H	Q 01/08/1998 00:00	01/08/1998 00:00	00367168H	GAMMA	1.040E+03	GWET	2.556E-01	4.239E-02	Cs134				6.530E-03	PCI/GWET	01/08/98
98024003	FISH	98.00656H	Q 01/08/1998 00:00	01/08/1998 00:00	00367168H	GAMMA	1.040E+03	GWET	2.556E-01	4.239E-02	Cs137	1.020E-02	2.600E-03			PCI/GWET	01/08/98
98024003	FISH	98.00656H	Q 01/08/1998 00:00	01/08/1998 00:00	00367168H	GAMMA	1.040E+03	GWET	2.556E-01	4.239E-02	Eu152				1.310E-02	PCI/GWET	01/08/98
98024003	FISH	98.00656H	Q 01/08/1998 00:00	01/08/1998 00:00	00367168H	GAMMA	1.040E+03	GWET	2.556E-01	4.239E-02	Eu154				3.680E-02	PCI/GWET	01/08/98
98024003	FISH	98.00656H	Q 01/08/1998 00:00	01/08/1998 00:00	00367168H	GAMMA	1.040E+03	GWET	2.556E-01	4.239E-02	Fe59				2.220E-02	PCI/GWET	01/08/98
98024003	FISH	98.00656H	Q 01/08/1998 00:00	01/08/1998 00:00	00367168H	GAMMA	1.040E+03	GWET	2.556E-01	4.239E-02	I131				8.270E-02	PCI/GWET	01/08/98
98024003	FISH	98.00656H	Q 01/08/1998 00:00	01/08/1998 00:00	00367168H	GAMMA	1.040E+03	GWET	2.556E-01	4.239E-02	K40	3.090E+00	9.200E-02			PCI/GWET	01/08/98
98024003	FISH	98.00656H	Q 01/08/1998 00:00	01/08/1998 00:00	00367168H	GAMMA	1.040E+03	GWET	2.556E-01	4.239E-02	La140				2.490E-02	PCI/GWET	01/08/98
98024003	FISH	98.00656H	Q 01/08/1998 00:00	01/08/1998 00:00	00367168H	GAMMA	1.040E+03	GWET	2.556E-01	4.239E-02	Mn54				5.880E-03	PCI/GWET	01/08/98
98024003	FISH	98.00656H	Q 01/08/1998 00:00	01/08/1998 00:00	00367168H	GAMMA	1.040E+03	GWET	2.556E-01	4.239E-02	Mo99						

97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Be7				8.730E-02	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Ce141				2.730E-02	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Ce144				2.420E-02	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Co58				9.150E-03	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Co60				5.500E-03	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Cs134				4.750E-03	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Cs137	3.700E-03	1.800E-03			PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Eu152				1.020E-02	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Eu154				2.820E-02	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Fe59				3.920E-02	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	I131				3.500E+00	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	K40	2.850E+00	7.600E-02			PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	La140				1.710E-02	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Mn54				5.120E-03	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Mo99				2.780E+00	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Na22				7.000E-03	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Nb95				9.590E-03	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Pr144				3.930E-01	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Ra226				6.830E-02	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Ra228				1.510E-02	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Ru103				1.610E-02	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Ru106				4.380E-02	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Sb125				2.420E-02	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Tl208	2.300E-03	U	3.100E-03		PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Zn65				1.520E-02	PCI/GWET	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00367169J	GAMMA	1.030E+03	GWET	3.236E-01	9.222E-02	Zr95				1.700E-02	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Am241				3.030E-02	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Ba140				3.180E+00	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Be7				4.590E-01	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Ce141				1.280E-02	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Ce144				3.320E-02	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Co58				1.960E-02	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Co60				1.120E-02	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Cs134				7.620E-03	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Cs137	4.700E-03	3.200E-03			PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Eu152				1.750E-02	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Eu154				5.550E-02	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Fe59				7.600E-02	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	I131				6.120E+00	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	K40	2.740E+00	1.300E-01			PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	La140				2.950E-02	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Mn54				1.020E-02	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Mo99				3.610E+00	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Na22				1.160E-02	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Nb95				1.740E-02	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Pr144				6.250E-01	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Ra226				1.100E-01	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Ra228				2.690E-02	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Ru103				3.400E-02	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Ru106				7.250E-02	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Sb125				4.340E-02	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Zn65				3.320E-02	PCI/GWET	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00367679C	GAMMA	1.030E+03	GWET	3.204E-01	9.153E-02	Zr95				3.580E-02	PCI/GWET	11/19/97

Client ID	Matrix	NAREL ID	Collect Start	Collect End	Ana. ID	QC	Procedure	Aliquot	Unit	Dry/Wet	Ash/Dry	Analyte	Conc.	Data Qualifiers	2*CSU	MDC	Unit	Res Date
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	00383336Z		PU	5.238E-01	GASH	3.343E-01	8.735E-02	Pu238	0.000E+00	U	2.100E-03	4.533E-03	PCI/GDRY	01/26/99
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	00383336Z		PU	5.238E-01	GASH	3.343E-01	8.735E-02	Pu239	-2.500E-04	U	3.500E-04	2.248E-03	PCI/GDRY	01/26/99
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	00383336Z		PU	5.238E-01	GASH	3.343E-01	8.735E-02	Yield	6.830E+01		5.200E+00	%		01/26/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384417D	MS	PU	5.035E-01	GASH	2.558E-01	1.821E-01	Pu238	-1.800E-03		3.400E-03	8.388E-03	PCI/GDRY	01/26/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384417D	MS	PU	5.035E-01	GASH	2.558E-01	1.821E-01	Pu239	3.130E-01		3.500E-02	1.831E-03	PCI/GDRY	01/26/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384417D	MS	PU	5.035E-01	GASH	2.558E-01	1.821E-01	Yield	8.480E+01		5.800E+00	%		01/26/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	384418	MSD	PU	5.043E-01	GASH	2.558E-01	1.821E-01	Pu238	2.300E-03		4.600E-03	8.331E-03	PCI/GDRY	01/26/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	384418	MSD	PU	5.043E-01	GASH	2.558E-01	1.821E-01	Pu239	3.180E-01		3.700E-02	4.221E-03	PCI/GDRY	01/26/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	384418	MSD	PU	5.043E-01	GASH	2.558E-01	1.821E-01	Yield	7.500E+01		5.400E+00	%		01/26/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384937Z		PU	2.529E-01	GASH	2.558E-01	1.821E-01	Pu238	-2.000E-03	not reported	1.700E-02	4.009E-02	PCI/GDRY	02/09/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384937Z		PU	2.529E-01	GASH	2.558E-01	1.821E-01	Pu239	-2.200E-03	not reported	3.100E-03	2.031E-02	PCI/GDRY	02/09/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384937Z		PU	2.529E-01	GASH	2.558E-01	1.821E-01	Yield	3.110E+01		3.200E+00	%		02/09/99
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00383344Z		PU	5.033E-01	GASH	2.490E-01	1.746E-01	Pu238	1.100E-03	U	3.400E-03	6.611E-03	PCI/GDRY	01/27/99
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00383344Z		PU	5.033E-01	GASH	2.490E-01	1.746E-01	Pu239	-3.600E-04	U	5.100E-04	3.278E-03	PCI/GDRY	01/27/99
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00383344Z		PU	5.033E-01	GASH	2.490E-01	1.746E-01	Yield	9.750E+01		6.500E+00	%		01/27/99
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00383348D		PU	5.305E-01	GASH	3.175E-01	6.278E-02	Pu238	1.700E-03	UJ	1.600E-03	2.284E-03	PCI/GDRY	01/27/99
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00383348D		PU	5.305E-01	GASH	3.175E-01	6.278E-02	Pu239	-7.000E-05	UJ	1.400E-04	1.058E-03	PCI/GDRY	01/27/99
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00383348D		PU	5.305E-01	GASH	3.175E-01	6.278E-02	Yield	8.630E+01		6.000E+00	%		01/27/99
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00383353A		PU	5.078E-01	GASH	2.596E-01	4.283E-02	Pu238	8.000E-04	U	1.100E-03	1.763E-03	PCI/GDRY	01/27/99
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00383353A		PU	5.078E-01	GASH	2.596E-01	4.283E-02	Pu239	3.500E-04	U	5.000E-04	5.322E-04	PCI/GDRY	01/27/99
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00383353A		PU	5.078E-01	GASH	2.596E-01	4.283E-02	Yield	6.990E+01		5.200E+00	%		01/27/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00383358F		PU	5.093E-01	GASH	2.593E-01	4.248E-02	Pu238	5.000E-04	U	1.100E-03	2.095E-03	PCI/GDRY	01/26/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00383358F		PU	5.093E-01	GASH	2.593E-01	4.248E-02	Pu239	5.900E-04	U	6.500E-04	8.335E-04	PCI/GDRY	01/26/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00383358F		PU	5.093E-01	GASH	2.593E-01	4.248E-02	Yield	7.520E+01		5.400E+00	%		01/26/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00384938A	DUP	PU	2.500E-01	GASH	2.593E-01	4.248E-02	Pu238	4.000E-04		2.500E-03	5.172E-03	PCI/GDRY	02/09/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00384938A	DUP	PU	2.500E-01	GASH	2.593E-01	4.248E-02	Pu239	1.100E-03		1.400E-03	2.058E-03	PCI/GDRY	02/09/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00384938A	DUP	PU	2.500E-01	GASH	2.593E-01	4.248E-02	Yield	6.200E+01		4.800E+00	%		02/09/99
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00383362B		PU	5.192E-01	GASH	3.376E-01	3.369E-02	Pu238	-1.800E-04	U	5.600E-04	1.442E-03	PCI/GDRY	01/27/99
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00383362B		PU	5.192E-01	GASH	3.376E-01	3.369E-02	Pu239	4.000E-05	U	2.900E-04	8.064E-04	PCI/GDRY	01/27/99
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00383362B		PU	5.192E-01	GASH	3.376E-01	3.369E-02	Yield	6.960E+01		5.100E+00	%		01/27/99
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00383366F		PU	5.057E-01	GASH	3.057E-01	3.872E-02	Pu238	8.000E-04	U	1.800E-03	3.249E-03	PCI/GDRY	01/28/99
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00383366F		PU	5.057E-01	GASH	3.057E-01	3.872E-02	Pu239	9.000E-05	U	5.800E-04	1.611E-03	PCI/GDRY	01/28/99
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00383366F		PU	5.057E-01	GASH	3.057E-01	3.872E-02	Yield	4.380E+01		4.000E+00	%		01/28/99
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	00383370B		PU	5.060E-01	GASH	3.015E-01	7.712E-02	Pu238	2.400E-03	UJ	2.400E-03	3.659E-03	PCI/GDRY	01/28/99
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	00383370B		PU	5.060E-01	GASH	3.015E-01	7.712E-02	Pu239	2.200E-04	UJ	6.900E-04	1.696E-03	PCI/GDRY	01/28/99
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	00383370B		PU	5.060E-01	GASH	3.015E-01	7.712E-02	Yield	6.940E+01		5.200E+00	%		01/28/99
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00383375G		PU	5.056E-01	GASH	2.490E-01	7.707E-02	Pu238	-3.000E-04	U	1.900E-03	4.193E-03	PCI/GDRY	01/28/99
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00383375G		PU	5.056E-01	GASH	2.490E-01	7.707E-02	Pu239	0.000E+00	U	0.000E+00	9.151E-04	PCI/GDRY	01/28/99
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00383375G		PU	5.056E-01	GASH	2.490E-01	7.707E-02	Yield	7.150E+01		5.200E+00	%		01/28/99
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00384669Y		PU	2.546E-01	GASH	2.663E-01	3.811E-02	Pu238	-4.000E-04	U	2.600E-03	5.705E-03	PCI/GDRY	02/02/99
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00384669Y		PU	2.546E-01	GASH	2.663E-01	3.811E-02	Pu239	4.200E-04	U	8.300E-04	1.245E-03	PCI/GDRY	02/02/99
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00384669Y		PU	2.546E-01	GASH	2.663E-01	3.811E-02	Yield	5.160E+01		4.300E+00	%		02/02/99
98024003	FISH	98.00656H	01/08/1998 00:00	01/08/1998 00:00	00384939B		PU	2.509E-01	GASH	2.556E-01	4.239E-02	Pu238	2.900E-03	U	4.900E-03	8.682E-03	PCI/GDRY	02/09/99
98024003	FISH	98.00656H	01/08/1998 00:00	01/08/1998 00:00	00384939B		PU	2.509E-01	GASH	2.556E-01	4.239E-02	Pu239	-5.300E-04	U	7.500E-04	4.856E-03	PCI/GDRY	02/09/99
98024003	FISH	98.00656H	01/08/1998 00:00	01/08/1998 00:00	00384939B		PU	2.509E-01	GASH	2.556E-01	4.239E-02	Yield	3.010E+01		3.100E+00	%		02/09/99
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00383388M		PU	5.344E-01	GASH	3.236E-01	9.222E-02	Pu238	5.000E-04	U	1.500E-03	3.096E-03	PCI/GDRY	01/28/99
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00383388M		PU	5.344E-01	GASH	3.236E-01	9.222E-02	Pu239	3.100E-04	U	6.200E-04	9.348E-04	PCI/GDRY	01/28/99
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00383388M		PU	5.344E-01	GASH	3.236E-01	9.222E-02	Yield	8.140E+01		5.700E+00	%		01/28/99
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00383392H		PU	5.115E-01	GASH	3.204E-01	9.153E-02	Pu238	1.000E-03	U	2.200E-03	4.046E-03	PCI/GDRY	01/28/99
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00383392H		PU	5.115E-01	GASH	3.204E-01	9.153E-02	Pu239	9.000E-04	U	1.300E-03	2.263E-03	PCI/GDRY	01/28/99
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00383392H		PU	5.115E-01	GASH	3.204E-01	9.153E-02	Yield	6.840E+01		5.100E+00	%		01/28/99

Client ID	Matrix	NAREL ID	Collect Start	Collect End	Ana. ID	QC	Procedure	Aliquot	Unit	Dry/Wet	Ash/Dry	Analyte	Conc.	Data Qualifiers	2*CSU	MDC	Unit	Res Date
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	00383336Z		PU	5.238E-01	GASH	3.343E-01	8.735E-02	Pu238	0.000E+00	U	2.100E-03	4.533E-03	PCI/GDRY	01/26/99
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	00383336Z		PU	5.238E-01	GASH	3.343E-01	8.735E-02	Pu239	-2.500E-04	U	3.500E-04	2.248E-03	PCI/GDRY	01/26/99
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	00383336Z		PU	5.238E-01	GASH	3.343E-01	8.735E-02	Yield	6.830E+01		5.200E+00	%		01/26/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384417D	MS	PU	5.035E-01	GASH	2.558E-01	1.821E-01	Pu238	-1.800E-03		3.400E-03	8.388E-03	PCI/GDRY	01/26/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384417D	MS	PU	5.035E-01	GASH	2.558E-01	1.821E-01	Pu239	3.130E-01		3.500E-02	1.831E-03	PCI/GDRY	01/26/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384417D	MS	PU	5.035E-01	GASH	2.558E-01	1.821E-01	Yield	8.480E+01		5.800E+00	%		01/26/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	384418	MSD	PU	5.043E-01	GASH	2.558E-01	1.821E-01	Pu238	2.300E-03		4.600E-03	8.331E-03	PCI/GDRY	01/26/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	384418	MSD	PU	5.043E-01	GASH	2.558E-01	1.821E-01	Pu239	3.180E-01		3.700E-02	4.221E-03	PCI/GDRY	01/26/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	384418	MSD	PU	5.043E-01	GASH	2.558E-01	1.821E-01	Yield	7.500E+01		5.400E+00	%		01/26/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384937Z		PU	2.529E-01	GASH	2.558E-01	1.821E-01	Pu238	-1.760E-03	U	3.500E-03	8.400E-03	PCI/GDRY	08/12/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384937Z		PU	2.529E-01	GASH	2.558E-01	1.821E-01	Pu239	0.000E+00	U	0.000E+00	1.800E-03	PCI/GDRY	08/12/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384937Z		PU	2.529E-01	GASH	2.558E-01	1.821E-01	Yield	3.110E+01		3.200E+00	%		02/09/99
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00383344Z		PU	5.033E-01	GASH	2.490E-01	1.746E-01	Pu238	1.100E-03	U	3.400E-03	6.611E-03	PCI/GDRY	01/27/99
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00383344Z		PU	5.033E-01	GASH	2.490E-01	1.746E-01	Pu239	-3.600E-04	U	5.100E-04	3.278E-03	PCI/GDRY	01/27/99
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00383344Z		PU	5.033E-01	GASH	2.490E-01	1.746E-01	Yield	9.750E+01		6.500E+00	%		01/27/99
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00383348D		PU	5.305E-01	GASH	3.175E-01	6.278E-02	Pu238	1.700E-03	UJ	1.600E-03	2.284E-03	PCI/GDRY	01/27/99
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00383348D		PU	5.305E-01	GASH	3.175E-01	6.278E-02	Pu239	-7.000E-05	UJ	1.400E-04	1.058E-03	PCI/GDRY	01/27/99
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00383348D		PU	5.305E-01	GASH	3.175E-01	6.278E-02	Yield	8.630E+01		6.000E+00	%		01/27/99
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00383353A		PU	5.078E-01	GASH	2.596E-01	4.283E-02	Pu238	8.000E-04	U	1.100E-03	1.763E-03	PCI/GDRY	01/27/99
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00383353A		PU	5.078E-01	GASH	2.596E-01	4.283E-02	Pu239	3.500E-04	U	5.000E-04	5.322E-04	PCI/GDRY	01/27/99
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00383353A		PU	5.078E-01	GASH	2.596E-01	4.283E-02	Yield	6.990E+01		5.200E+00	%		01/27/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00383358F		PU	5.093E-01	GASH	2.593E-01	4.248E-02	Pu238	5.000E-04	U	1.100E-03	2.095E-03	PCI/GDRY	01/26/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00383358F		PU	5.093E-01	GASH	2.593E-01	4.248E-02	Pu239	5.900E-04	U	6.500E-04	8.335E-04	PCI/GDRY	01/26/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00383358F		PU	5.093E-01	GASH	2.593E-01	4.248E-02	Yield	7.520E+01		5.400E+00	%		01/26/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00384938A	DUP	PU	2.500E-01	GASH	2.593E-01	4.248E-02	Pu238	4.000E-04		2.500E-03	5.172E-03	PCI/GDRY	02/09/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00384938A	DUP	PU	2.500E-01	GASH	2.593E-01	4.248E-02	Pu239	1.100E-03		1.400E-03	2.058E-03	PCI/GDRY	02/09/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00384938A	DUP	PU	2.500E-01	GASH	2.593E-01	4.248E-02	Yield	6.200E+01		4.800E+00	%		02/09/99
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00383362B		PU	5.192E-01	GASH	3.376E-01	3.369E-02	Pu238	-1.800E-04	U	5.600E-04	1.442E-03	PCI/GDRY	01/27/99
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00383362B		PU	5.192E-01	GASH	3.376E-01	3.369E-02	Pu239	4.000E-05	U	2.900E-04	8.064E-04	PCI/GDRY	01/27/99
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00383362B		PU	5.192E-01	GASH	3.376E-01	3.369E-02	Yield	6.960E+01		5.100E+00	%		01/27/99
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00383366F		PU	5.057E-01	GASH	3.057E-01	3.872E-02	Pu238	8.000E-04	U	1.800E-03	3.249E-03	PCI/GDRY	01/28/99
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00383366F		PU	5.057E-01	GASH	3.057E-01	3.872E-02	Pu239	9.000E-05	U	5.800E-04	1.611E-03	PCI/GDRY	01/28/99
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00383366F		PU	5.057E-01	GASH	3.057E-01	3.872E-02	Yield	4.380E+01		4.000E+00	%		01/28/99
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	00383370B		PU	5.060E-01	GASH	3.015E-01	7.712E-02	Pu238	2.400E-03	UJ	2.400E-03	3.659E-03	PCI/GDRY	01/28/99
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	00383370B		PU	5.060E-01	GASH	3.015E-01	7.712E-02	Pu239	2.200E-04	UJ	6.900E-04	1.696E-03	PCI/GDRY	01/28/99
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	00383370B		PU	5.060E-01	GASH	3.015E-01	7.712E-02	Yield	6.940E+01		5.200E+00	%		01/28/99
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00383375G		PU	5.056E-01	GASH	2.490E-01	7.707E-02	Pu238	-3.000E-04	U	1.900E-03	4.193E-03	PCI/GDRY	01/28/99
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00383375G		PU	5.056E-01	GASH	2.490E-01	7.707E-02	Pu239	0.000E+00	U	0.000E+00	9.151E-04	PCI/GDRY	01/28/99
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00383375G		PU	5.056E-01	GASH	2.490E-01	7.707E-02	Yield	7.150E+01		5.200E+00	%		01/28/99
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00384669Y		PU	2.546E-01	GASH	2.663E-01	3.811E-02	Pu238	-4.000E-04	U	2.600E-03	5.705E-03	PCI/GDRY	02/02/99
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00384669Y		PU	2.546E-01	GASH	2.663E-01	3.811E-02	Pu239	4.200E-04	U	8.300E-04	1.245E-03	PCI/GDRY	02/02/99
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00384669Y		PU	2.546E-01	GASH	2.663E-01	3.811E-02	Yield	5.160E+01		4.300E+00	%		02/02/99
98024003	FISH	98.00656H	01/08/1998 00:00	01/08/1998 00:00	00384939B		PU	2.509E-01	GASH	2.556E-01	4.239E-02	Pu238	2.900E-03	U	4.900E-03	8.682E-03	PCI/GDRY	02/09/99
98024003	FISH	98.00656H	01/08/1998 00:00	01/08/1998 00:00	00384939B		PU	2.509E-01	GASH	2.556E-01	4.239E-02	Pu239	-5.300E-04	U	7.500E-04	4.856E-03	PCI/GDRY	02/09/99
98024003	FISH	98.00656H	01/08/1998 00:00	01/08/1998 00:00	00384939B		PU	2.509E-01	GASH	2.556E-01	4.239E-02	Yield	3.010E+01		3.100E+00	%		02/09/99
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00383388M		PU	5.344E-01	GASH	3.236E-01	9.222E-02	Pu238	5.000E-04	U	1.500E-03	3.096E-03	PCI/GDRY	01/28/99
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00383388M		PU	5.344E-01	GASH	3.236E-01	9.222E-02	Pu239	3.100E-04	U	6.200E-04	9.348E-04	PCI/GDRY	01/28/99
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00383388M		PU	5.344E-01	GASH	3.236E-01	9.222E-02	Yield	8.140E+01		5.700E+00	%		01/28/99
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00383392H		PU	5.115E-01	GASH	3.204E-01	9.153E-02	Pu238	1.000E-03	U	2.200E-03	4.046E-03	PCI/GDRY	01/28/99
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00383392H		PU	5.115E-01	GASH	3.204E-01	9.153E-02	Pu239	9.000E-04	U	1.300E-03	2.263E-03	PCI/GDRY	01/28/99
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00383392H		PU	5.115E-01	GASH	3.204E-01	9.153E-02	Yield	6.840E+01		5.100E+00	%		01/28/99

Client ID	Matrix	NAREL ID	Collect Start	Collect End	Ana. ID	QC	Procedure	Aliquot	Unit	Dry/Wet	Ash/Dry	Analyte	Conc.	2*CSU	MDC	Unit	Res Date
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	401361		SR	5.010E-01	GASH	3.343E-01	8.735E-02	Sr89	6.000E+02	1.400E+03	2.400E+03	PCI/GDRY	12/09/97
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	401361		SR	5.010E-01	GASH	3.343E-01	8.735E-02	Sr90	1.700E-02	6.900E-02	1.213E-01	PCI/GDRY	12/09/97
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	00401392M	DUP	SR	5.030E-01	GASH	3.343E-01	8.735E-02	Sr89	-1.000E+03	1.200E+03	2.468E+03	PCI/GDRY	12/09/97
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	00401392M	DUP	SR	5.030E-01	GASH	3.343E-01	8.735E-02	Sr90	7.400E-02	6.100E-02	1.075E-01	PCI/GDRY	12/09/97
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00401362F		SR	5.000E-01	GASH	2.558E-01	1.821E-01	Sr89	-2.200E+04	4.200E+04	1.725E+05	PCI/GDRY	12/09/97
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00401362F		SR	5.000E-01	GASH	2.558E-01	1.821E-01	Sr90	4.900E-01	9.400E-01	3.058E+00	PCI/GDRY	12/09/97
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00401397T	MS	SR	4.990E-01	GASH	2.558E-01	1.821E-01	Sr89	4.000E+03	1.500E+04	2.441E+04	PCI/GDRY	12/09/97
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00401397T	MS	SR	4.990E-01	GASH	2.558E-01	1.821E-01	Sr90	8.060E+00	6.000E-01	2.688E-01	PCI/GDRY	12/09/97
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00401399V	MSD	SR	5.010E-01	GASH	2.558E-01	1.821E-01	Sr89	-2.300E+04	1.500E+04	2.651E+04	PCI/GDRY	12/09/97
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00401399V	MSD	SR	5.010E-01	GASH	2.558E-01	1.821E-01	Sr90	8.790E+00	6.200E-01	2.669E-01	PCI/GDRY	12/09/97
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00401363G		SR	5.020E-01	GASH	2.490E-01	1.746E-01	Sr89	-3.000E+02	2.500E+03	4.728E+03	PCI/GDRY	12/10/97
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00401363G		SR	5.020E-01	GASH	2.490E-01	1.746E-01	Sr90	6.000E-02	1.300E-01	2.253E-01	PCI/GDRY	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00401379Q		SR	5.000E-01	GASH	3.175E-01	6.278E-02	Sr89	-1.000E+03	1.400E+03	2.680E+03	PCI/GDRY	12/10/97
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	00401379Q		SR	5.000E-01	GASH	3.175E-01	6.278E-02	Sr90	4.200E-02	5.100E-02	9.049E-02	PCI/GDRY	12/10/97
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	401426		SR	5.000E-01	GASH	2.596E-01	4.283E-02	Sr89	1.200E+04	2.100E+04	3.624E+04	PCI/GDRY	04/02/97
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	401426		SR	5.000E-01	GASH	2.596E-01	4.283E-02	Sr90	-7.000E-03	3.200E-02	6.248E-02	PCI/GDRY	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00401380H		SR	5.000E-01	GASH	2.593E-01	4.248E-02	Sr89	-8.000E+03	2.000E+04	4.013E+04	PCI/GDRY	04/02/97
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00401380H		SR	5.000E-01	GASH	2.593E-01	4.248E-02	Sr90	2.800E-02	3.300E-02	5.671E-02	PCI/GDRY	04/02/97
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00401381J		SR	5.030E-01	GASH	3.376E-01	3.369E-02	Sr89	-1.000E+03	3.300E+03	6.130E+03	PCI/GDRY	08/05/97
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00401381J		SR	5.030E-01	GASH	3.376E-01	3.369E-02	Sr90	9.000E-03	2.900E-02	5.081E-02	PCI/GDRY	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00401382K		SR	5.000E-01	GASH	3.057E-01	3.872E-02	Sr89	-2.500E+03	5.300E+03	1.018E+04	PCI/GDRY	08/05/97
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00401382K		SR	5.000E-01	GASH	3.057E-01	3.872E-02	Sr90	2.500E-02	3.400E-02	5.993E-02	PCI/GDRY	08/05/97
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	00401385N		SR	5.000E-01	GASH	3.015E-01	7.712E-02	Sr89	6.000E+02	1.200E+03	2.175E+03	PCI/GDRY	01/07/98
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	00401385N		SR	5.000E-01	GASH	3.015E-01	7.712E-02	Sr90	-1.400E-02	6.500E-02	1.201E-01	PCI/GDRY	01/07/98
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00401388R		SR	5.020E-01	GASH	2.490E-01	7.707E-02	Sr89	7.000E+02	1.200E+03	2.048E+03	PCI/GDRY	01/07/98
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00401388R		SR	5.020E-01	GASH	2.490E-01	7.707E-02	Sr90	7.000E-03	6.300E-02	1.134E-01	PCI/GDRY	01/07/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00401389T		SR	5.030E-01	GASH	2.663E-01	3.811E-02	Sr89	-3.400E+02	5.700E+02	1.105E+03	PCI/GDRY	01/08/98
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00401389T		SR	5.030E-01	GASH	2.663E-01	3.811E-02	Sr90	1.300E-02	3.100E-02	5.718E-02	PCI/GDRY	01/08/98
98024003	FISH	98.00656H	01/08/1998 00:00	01/08/1998 00:00	00401395Q		SR	5.010E-01	GASH	2.556E-01	4.239E-02	Sr89	-1.000E+02	6.800E+02	1.253E+03	PCI/GDRY	01/08/98
98024003	FISH	98.00656H	01/08/1998 00:00	01/08/1998 00:00	00401395Q		SR	5.010E-01	GASH	2.556E-01	4.239E-02	Sr90	9.000E-03	3.600E-02	6.436E-02	PCI/GDRY	01/08/98
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00401396R		SR	5.020E-01	GASH	3.236E-01	9.222E-02	Sr89	-1.500E+03	3.000E+03	5.674E+03	PCI/GDRY	11/19/97
97470990	FISH	98.00657J	11/19/1997 00:00	11/19/1997 00:00	00401396R		SR	5.020E-01	GASH	3.236E-01	9.222E-02	Sr90	7.000E-02	7.800E-02	1.339E-01	PCI/GDRY	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00401398U		SR	5.030E-01	GASH	3.204E-01	9.153E-02	Sr89	2.500E+03	3.800E+03	6.943E+03	PCI/GDRY	11/19/97
97470991	FISH	98.00658K	11/19/1997 00:00	11/19/1997 00:00	00401398U		SR	5.030E-01	GASH	3.204E-01	9.153E-02	Sr90	-4.000E-02	9.900E-02	1.925E-01	PCI/GDRY	11/19/97

Client ID	Matrix	NAREL ID	Collect Start	Collect End	Ana. ID	QC	Procedure	Aliquot	Unit	Dry/Wet	Ash/Dry	Analyte	Conc.	Data Qualifiers	2*CSU	MDC	Unit	Res Date
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	00383337A		U	5.060E-01	GASH	3.343E-01	8.735E-02	U234	4.100E-03	U	2.800E-03	3.134E-03	PCI/GDRY	02/08/99
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	00383337A		U	5.060E-01	GASH	3.343E-01	8.735E-02	U235	0.000E+00		0.000E+00	1.424E-03	PCI/GDRY	02/08/99
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	00383337A		U	5.060E-01	GASH	3.343E-01	8.735E-02	U238	4.000E-03		2.500E-03	1.189E-03	PCI/GDRY	02/08/99
97500950	FISH	98.00645	12/09/1997 00:00	12/09/1997 00:00	00383337A		U	5.060E-01	GASH	3.343E-01	8.735E-02	Yield	6.570E+01		4.100E+00	%		02/08/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00383341W		U	5.043E-01	GASH	2.558E-01	1.821E-01	U234	5.900E-02		1.400E-02	4.697E-03	PCI/GDRY	02/08/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00383341W		U	5.043E-01	GASH	2.558E-01	1.821E-01	U235	8.000E-03		5.600E-03	4.788E-03	PCI/GDRY	02/08/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00383341W		U	5.043E-01	GASH	2.558E-01	1.821E-01	U238	4.200E-02		1.200E-02	3.998E-03	PCI/GDRY	02/08/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00383341W		U	5.043E-01	GASH	2.558E-01	1.821E-01	Yield	6.970E+01		4.300E+00	%		02/08/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384814N	MS	U	5.008E-01	GASH	2.558E-01	1.821E-01	U234	6.630E-01		8.100E-02	9.847E-03	PCI/GDRY	02/08/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384814N	MS	U	5.008E-01	GASH	2.558E-01	1.821E-01	U235	3.300E-02		1.600E-02	1.141E-02	PCI/GDRY	02/08/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384814N	MS	U	5.008E-01	GASH	2.558E-01	1.821E-01	U238	7.310E-01		8.700E-02	4.478E-03	PCI/GDRY	02/08/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384814N	MS	U	5.008E-01	GASH	2.558E-01	1.821E-01	Yield	3.490E+01		2.700E+00	%		02/08/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384815P	MSD	U	5.040E-01	GASH	2.558E-01	1.821E-01	U234	7.100E-01		1.100E-01	1.975E-02	PCI/GDRY	02/08/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384815P	MSD	U	5.040E-01	GASH	2.558E-01	1.821E-01	U235	3.900E-02		2.200E-02	8.975E-03	PCI/GDRY	02/08/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384815P	MSD	U	5.040E-01	GASH	2.558E-01	1.821E-01	U238	7.200E-01		1.100E-01	7.494E-03	PCI/GDRY	02/08/99
97500953	FISH	98.00646F	12/09/1997 00:00	12/09/1997 00:00	00384815P	MSD	U	5.040E-01	GASH	2.558E-01	1.821E-01	Yield	2.080E+01		2.000E+00	%		02/08/99
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00383345A		U	5.608E-01	GASH	2.490E-01	1.746E-01	U234	6.600E-02		1.300E-02	3.221E-03	PCI/GDRY	02/08/99
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00383345A		U	5.608E-01	GASH	2.490E-01	1.746E-01	U235	5.200E-03		4.000E-03	2.228E-03	PCI/GDRY	02/08/99
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00383345A		U	5.608E-01	GASH	2.490E-01	1.746E-01	U238	5.800E-02		1.300E-02	1.861E-03	PCI/GDRY	02/08/99
97500954	FISH	98.00647G	12/10/1997 00:00	12/10/1997 00:00	00383345A		U	5.608E-01	GASH	2.490E-01	1.746E-01	Yield	7.260E+01		4.400E+00	%		02/08/99
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	383349		U	5.108E-01	GASH	3.175E-01	6.278E-02	U234	1.700E-03	J	1.300E-03	1.591E-03	PCI/GDRY	02/09/99
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	383349		U	5.108E-01	GASH	3.175E-01	6.278E-02	U235	4.800E-04	UJ	6.800E-04	7.232E-04	PCI/GDRY	02/09/99
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	383349		U	5.108E-01	GASH	3.175E-01	6.278E-02	U238	1.400E-03	J	1.100E-03	6.039E-04	PCI/GDRY	02/09/99
97500957	FISH	98.00648H	12/10/1997 00:00	12/10/1997 00:00	383349		U	5.108E-01	GASH	3.175E-01	6.278E-02	Yield	9.220E+01		5.200E+00	%		02/09/99
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00383354B		U	5.076E-01	GASH	2.596E-01	4.283E-02	U234	1.600E-03		1.100E-03	9.399E-04	PCI/GDRY	02/06/99
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00383354B		U	5.076E-01	GASH	2.596E-01	4.283E-02	U235	1.200E-03	U	1.100E-03	1.322E-03	PCI/GDRY	02/06/99
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00383354B		U	5.076E-01	GASH	2.596E-01	4.283E-02	U238	1.600E-03		1.100E-03	9.399E-04	PCI/GDRY	02/06/99
97140800	FISH	98.00649J	04/02/1997 00:00	04/02/1997 00:00	00383354B		U	5.076E-01	GASH	2.596E-01	4.283E-02	Yield	6.850E+01		4.200E+00	%		02/06/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00384816Q	DUP	U	2.562E-01	GASH	2.593E-01	4.248E-02	U234	5.100E-03		2.400E-03	1.612E-03	PCI/GDRY	02/09/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00384816Q	DUP	U	2.562E-01	GASH	2.593E-01	4.248E-02	U235	1.500E-03		1.400E-03	1.643E-03	PCI/GDRY	02/09/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00384816Q	DUP	U	2.562E-01	GASH	2.593E-01	4.248E-02	U238	2.600E-03		1.700E-03	1.372E-03	PCI/GDRY	02/09/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00384816Q	DUP	U	2.562E-01	GASH	2.593E-01	4.248E-02	Yield	9.330E+01		5.200E+00	%		02/09/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00385215Z		U	1.263E-01	GASH	2.593E-01	4.248E-02	U234	5.200E-03		3.900E-03	4.438E-03	PCI/GDRY	02/17/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00385215Z		U	1.263E-01	GASH	2.593E-01	4.248E-02	U235	2.200E-03	U	2.500E-03	2.159E-03	PCI/GDRY	02/17/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00385215Z		U	1.263E-01	GASH	2.593E-01	4.248E-02	U238	4.800E-03		3.400E-03	1.803E-03	PCI/GDRY	02/17/99
97140801	FISH	98.00650B	04/02/1997 00:00	04/02/1997 00:00	00385215Z		U	1.263E-01	GASH	2.593E-01	4.248E-02	Yield	8.010E+01		4.700E+00	%		02/17/99
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00385160B		U	1.354E-01	GASH	3.376E-01	3.369E-02	U234	2.200E-03	U	2.100E-03	2.567E-03	PCI/GDRY	02/17/99
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00385160B		U	1.354E-01	GASH	3.376E-01	3.369E-02	U235	2.000E-04		1.100E-03	3.075E-03	PCI/GDRY	02/17/99
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00385160B		U	1.354E-01	GASH	3.376E-01	3.369E-02	U238	1.500E-03	U	1.700E-03	2.185E-03	PCI/GDRY	02/17/99
97320850	FISH	98.00651C	08/05/1997 00:00	08/05/1997 00:00	00385160B		U	1.354E-01	GASH	3.376E-01	3.369E-02	Yield	8.500E+01		4.900E+00	%		02/17/99
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00383367G		U	2.596E-01	GASH	3.057E-01	3.872E-02	U234	3.000E-03	U	3.100E-03	4.394E-03	PCI/GDRY	02/07/99
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00383367G		U	2.596E-01	GASH	3.057E-01	3.872E-02	U235	2.700E-03		2.700E-03	1.997E-03	PCI/GDRY	02/07/99
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00383367G		U	2.596E-01	GASH	3.057E-01	3.872E-02	U238	2.200E-03		2.200E-03	1.667E-03	PCI/GDRY	02/07/99
97320851	FISH	98.00652D	08/05/1997 00:00	08/05/1997 00:00	00383367G		U	2.596E-01	GASH	3.057E-01	3.872E-02	Yield	4.050E+01		3.000E+00	%		02/07/99
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	00383371C		U	5.095E-01	GASH	3.015E-01	7.712E-02	U234	3.750E-02	J	6.900E-03	1.716E-03	PCI/GDRY	02/07/99
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	00383371C		U	5.095E-01	GASH	3.015E-01	7.712E-02	U235	2.900E-03	J	2.000E-03	1.749E-03	PCI/GDRY	02/07/99
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	00383371C		U	5.095E-01	GASH	3.015E-01	7.712E-02	U238	2.860E-02	J	5.900E-03	1.461E-03	PCI/GDRY	02/07/99
98024000	FISH	98.00653	01/07/1998 00:00	01/07/1998 00:00	00383371C		U	5.095E-01	GASH	3.015E-01	7.712E-02	Yield	8.000E+01		4.700E+00	%		02/07/99
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00383376H		U	5.021E-01	GASH	2.490E-01	7.707E-02	U234	1.160E-02		4.100E-03	2.240E-03	PCI/GDRY	02/07/99
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00383376H		U	5.021E-01	GASH	2.490E-01	7.707E-02	U235	2.100E-03	U	2.000E-03	2.596E-03	PCI/GDRY	02/07/99
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00383376H		U	5.021E-01	GASH	2.490E-01	7.707E-02	U238	6.100E-03		2.900E-03	1.019E-03	PCI/GDRY	02/07/99
98024001	FISH	98.00654F	01/07/1998 00:00	01/07/1998 00:00	00383376H		U	5.021E-01	GASH	2.490E-01	7.707E-02	Yield	6.470E+01		4.000E+00	%		02/07/99
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00383380D		U	2.540E-01	GASH	2.663E-01	3.811E-02	U234	3.100E-03	U	2.600E-03	3.367E-03	PCI/GDRY	02/07/99
98024002	FISH	98.00655G	01/08/1998 00:00	01/08/1998 00:00	00383380D		U	2.540E-01	GASH	2.663E-01	3							

Client ID	Matrix	NAREL ID	Collect Start	Collect End	Ana. ID	QC	Procedure	Aliquot	Unit	Dry/Wet	Ash/Dry	Analyte	Conc.	2*CSU	MDC	Unit	Res Date
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00383394K		ALPBET	1.001E-01	GASH	3.134E-01	9.541E-02	Alpha	2.200E-01	3.400E-01	5.959E-01	PCI/GDRY	02/02/99
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00383394K		ALPBET	1.001E-01	GASH	3.134E-01	9.541E-02	Beta	1.034E+01	6.900E-01	3.607E-01	PCI/GDRY	02/02/99
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00383398P		ALPBET	9.740E-02	GASH	2.896E-01	6.455E-02	Alpha	1.900E-01	2.900E-01	4.986E-01	PCI/GDRY	02/02/99
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00383398P		ALPBET	9.740E-02	GASH	2.896E-01	6.455E-02	Beta	1.195E+01	6.200E-01	2.650E-01	PCI/GDRY	02/02/99
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00383450A	DUP	ALPBET	9.630E-02	GASH	2.896E-01	6.455E-02	Alpha	4.300E-01	3.400E-01	4.491E-01	PCI/GDRY	02/02/99
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00383450A	DUP	ALPBET	9.630E-02	GASH	2.896E-01	6.455E-02	Beta	1.228E+01	6.300E-01	2.713E-01	PCI/GDRY	02/02/99
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00383403T		ALPBET	1.038E-01	GASH	2.979E-01	6.158E-02	Alpha	2.300E-01	2.800E-01	4.507E-01	PCI/GDRY	02/02/99
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00383403T		ALPBET	1.038E-01	GASH	2.979E-01	6.158E-02	Beta	1.195E+01	5.700E-01	2.303E-01	PCI/GDRY	02/02/99
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00383407X		ALPBET	1.034E-01	GASH	2.945E-01	6.258E-02	Alpha	1.700E-01	2.700E-01	4.788E-01	PCI/GDRY	02/02/99
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00383407X		ALPBET	1.034E-01	GASH	2.945E-01	6.258E-02	Beta	1.160E+01	5.700E-01	2.284E-01	PCI/GDRY	02/02/99
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00383411T		ALPBET	1.034E-01	GASH	3.190E-01	9.552E-02	Alpha	1.200E-01	3.300E-01	6.654E-01	PCI/GDRY	02/02/99
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00383411T		ALPBET	1.034E-01	GASH	3.190E-01	9.552E-02	Beta	8.970E+00	6.400E-01	3.587E-01	PCI/GDRY	02/02/99
97500965	FISH	98.00664H	12/09/1997 00:00	12/09/1997 00:00	00383415X		ALPBET	1.053E-01	GASH	2.530E-01	4.222E-02	Alpha	6.000E-02	1.400E-01	2.799E-01	PCI/GDRY	02/02/99
97500965	FISH	98.00664H	12/09/1997 00:00	12/09/1997 00:00	00383415X		ALPBET	1.053E-01	GASH	2.530E-01	4.222E-02	Beta	1.113E+01	4.500E-01	1.444E-01	PCI/GDRY	02/02/99
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00383420U		ALPBET	1.047E-01	GASH	2.552E-01	4.439E-02	Alpha	2.200E-01	1.900E-01	2.600E-01	PCI/GDRY	02/02/99
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00383420U		ALPBET	1.047E-01	GASH	2.552E-01	4.439E-02	Beta	1.228E+01	4.800E-01	1.518E-01	PCI/GDRY	02/02/99
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00383424Y		ALPBET	1.068E-01	GASH	2.549E-01	4.436E-02	Alpha	2.600E-01	2.200E-01	2.996E-01	PCI/GDRY	02/02/99
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00383424Y		ALPBET	1.068E-01	GASH	2.549E-01	4.436E-02	Beta	1.218E+01	4.900E-01	1.711E-01	PCI/GDRY	02/02/99
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00383428C		ALPBET	1.071E-01	GASH	3.238E-01	3.249E-02	Alpha	2.700E-01	1.700E-01	1.888E-01	PCI/GDRY	02/02/99
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00383428C		ALPBET	1.071E-01	GASH	3.238E-01	3.249E-02	Beta	8.450E+00	3.400E-01	1.174E-01	PCI/GDRY	02/02/99
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00383432Y		ALPBET	1.040E-01	GASH	3.074E-01	7.221E-02	Alpha	6.400E-01	4.900E-01	6.819E-01	PCI/GDRY	02/02/99
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00383432Y		ALPBET	1.040E-01	GASH	3.074E-01	7.221E-02	Beta	7.420E+00	5.000E-01	2.816E-01	PCI/GDRY	02/02/99
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00383437D		ALPBET	1.051E-01	GASH	2.402E-01	7.332E-02	Alpha	2.800E-01	2.900E-01	4.410E-01	PCI/GDRY	02/02/99
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00383437D		ALPBET	1.051E-01	GASH	2.402E-01	7.332E-02	Beta	8.650E+00	5.300E-01	2.528E-01	PCI/GDRY	02/02/99
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00383441Z		ALPBET	1.030E-01	GASH	2.602E-01	9.139E-02	Alpha	7.000E-01	4.700E-01	5.686E-01	PCI/GDRY	02/02/99
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00383441Z		ALPBET	1.030E-01	GASH	2.602E-01	9.139E-02	Beta	8.360E+00	5.900E-01	3.204E-01	PCI/GDRY	02/02/99
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00383445D		ALPBET	1.033E-01	GASH	3.003E-01	7.175E-02	Alpha	2.200E-01	2.900E-01	4.656E-01	PCI/GDRY	02/02/99
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00383445D		ALPBET	1.033E-01	GASH	3.003E-01	7.175E-02	Beta	7.320E+00	5.000E-01	2.682E-01	PCI/GDRY	02/02/99

Client ID	Matrix	NAREL ID	Collect Start	Collect End	Ana. ID	QC	Procedure	Aliquot	Unit	Dry/Wet	Ash/Dry	Analyte	Conc.	Data	2*CSU	MDC	Unit	Res Date
														Qualifiers				
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Am241				2.160E-02	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Ba140				2.500E+00	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Be7				1.510E-01	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Ce141				4.180E-02	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Ce144				3.390E-02	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Co58				1.940E-02	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Co60				1.260E-02	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Cs134				8.810E-03	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Cs137				8.050E-03	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Eu152				1.660E-02	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Eu154				5.900E-02	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Fe59				6.770E-02	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	I131				5.500E+00	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	K40	2.760E+00		1.500E-01		PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	La140				3.220E-02	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Mn54				1.070E-02	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Mo99				3.980E+00	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Na22				1.290E-02	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Nb95				1.910E-02	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Pr144				6.290E-01	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Ra226				9.950E-02	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Ra228				3.120E-02	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Ru103				3.040E-02	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Ru106				7.850E-02	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Sb125				4.030E-02	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Zn65				3.200E-02	PCI/GWET	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00367171C		GAMMA	1.080E+03	GWET	3.134E-01	9.541E-02	Zr95				3.320E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Am241				2.530E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Ba140				2.010E+00	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Be7				1.200E-01	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Ce141				3.760E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Ce144				3.170E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Co58				1.280E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Co60				8.680E-03	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Cs134				6.820E-03	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Cs137	6.200E-03		2.800E-03		PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Eu152				1.350E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Eu154				4.280E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Fe59				5.610E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	I131				4.940E+00	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	K40	3.360E+00		1.100E-01		PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	La140				2.350E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Mn54				7.600E-03	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Mo99				3.700E+00	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Na22				9.800E-03	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Nb95				1.430E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Pb212	5.700E-03	U	6.100E-03		PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Pr144				5.210E-01	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Ra226				9.260E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Ra228				2.440E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Ru103				2.340E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Ru106				5.630E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Sb125				3.300E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Zn65				2.490E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00367172D		GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Zr95				2.580E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	367173	DUP	GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Am241				2.070E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	367173	DUP	GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Ba140				2.090E+00	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	367173	DUP	GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Be7				9.440E-02	PCI/GWET	11/1

97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	367173	DUP	GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	K40	3.350E+00		8.200E-02		PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	367173	DUP	GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	La140				1.610E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	367173	DUP	GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Mn54				5.460E-03	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	367173	DUP	GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Mo99				2.910E+00	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	367173	DUP	GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Na22				7.400E-03	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	367173	DUP	GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Nb95				1.030E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	367173	DUP	GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Pr144				3.960E-01	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	367173	DUP	GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Ra226	3.900E-02		5.900E-02		PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	367173	DUP	GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Ra228				1.630E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	367173	DUP	GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Ru103				1.870E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	367173	DUP	GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Ru106				4.570E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	367173	DUP	GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Sb125				2.450E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	367173	DUP	GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Zn65				1.600E-02	PCI/GWET	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	367173	DUP	GAMMA	1.020E+03	GWET	2.896E-01	6.455E-02	Zr95				2.010E-02	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Am241				3.060E-02	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Ba140				1.820E+00	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Be7				1.210E-01	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Ce141				3.750E-02	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Ce144				3.220E-02	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Co58				1.340E-02	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Co60				7.290E-03	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Cs134				7.460E-03	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Cs137	3.400E-03		2.400E-03		PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Eu152				1.540E-02	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Eu154				3.750E-02	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Fe59				5.070E-02	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	I131				5.040E+00	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	K40	3.120E+00		9.100E-02		PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	La140				2.370E-02	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Mn54				7.070E-03	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Mo99				3.680E+00	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Na22				9.910E-03	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Nb95				1.320E-02	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Pb212	7.800E-03		5.500E-03		PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Pr144				4.780E-01	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Ra226				1.000E-01	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Ra228				2.260E-02	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Ru103				2.220E-02	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Ru106				6.140E-02	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Sb125				3.100E-02	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Ti208	2.800E-03	U	3.300E-03		PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Zn65				2.140E-02	PCI/GWET	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00367174F		GAMMA	1.030E+03	GWET	2.979E-01	6.158E-02	Zr95				2.280E-02	PCI/GWET	11/19/97
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00367175G		GAMMA	1.030E+03	GWET	2.945E-01	6.258E-02	Am241				3.290E-02	PCI/GWET	11/19/97
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00367175G		GAMMA	1.030E+03	GWET	2.945E-01	6.258E-02	Ba140				1.730E+00	PCI/GWET	11/19/97
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00367175G		GAMMA	1.030E+03	GWET	2.945E-01	6.258E-02	Be7				1.250E-01	PCI/GWET	11/19/97
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00367175G		GAMMA	1.030E+03	GWET	2.945E-01	6.258E-02	Bi214	9.700E-03		7.800E-03		PCI/GWET	11/19/97
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00367175G		GAMMA	1.030E+03	GWET	2.945E-01	6.258E-02	Ce141				4.020E-02	PCI/GWET	11/19/97
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00367175G		GAMMA	1.030E+03	GWET	2.945E-01	6.258E-02	Ce144				3.110E-02	PCI/GWET	11/19/97
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00367175G		GAMMA	1.030E+03	GWET	2.945E-01	6.258E-02	Co58				1.290E-02	PCI/GWET	11/19/97
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00367175G		GAMMA	1.030E+03	GWET	2.945E-01	6.258E-02	Co60				7.610E-03	PCI/GWET	11/19/97
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00367175G		GAMMA	1.030E+03	GWET	2.945E-01	6.258E-02	Cs134				6.200E-03	PCI/GWET	11/19/97
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00367175G		GAMMA	1.030E+03	GWET	2.945E-01	6.258E-02	Cs137	4.000E-03		3.000E-03		PCI/GWET	11/19/97
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00367175G		GAMMA	1.030E+03	GWET	2.945E-01	6.258E-02	Eu152				1.440E-02	PCI/GWET	11/19/97
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00367175G		GAMMA	1.030E+03	GWET	2.945E-01	6.258E-02	Eu154				3.790E-02	PCI/GWET	11/19/97
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00367175G		GAMMA	1.030E+03	GWET	2.945E-01	6.258E-02	Fe59				5.240E-02	PCI/GWET	11/19/97
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00367175G		GAMMA	1.030E+03	GWET	2.945E-01	6.258E-02	I131				4.660E+00	PCI/GWET	11/19/97
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00367175G		GAMMA	1.030E+03	GWET	2.945E-01	6.258E-02	K40	3.160E+00		1.000E-01		PCI/GWET	11/19/97
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00367175G		GAMMA	1.030E+03	GWET	2.945E-01	6.258E-02	La140				2.220E-02		

97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00367175G	GAMMA	1.030E+03	GWET	2.945E-01	6.258E-02	Zr95				2.420E-02	PCI/GWET	11/19/97
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00367176H	GAMMA	1.070E+03	GWET	3.190E-01	9.552E-02	Am241				2.630E-02	PCI/GWET	11/19/97
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00367176H	GAMMA	1.070E+03	GWET	3.190E-01	9.552E-02	Ba140				1.640E+00	PCI/GWET	11/19/97
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00367176H	GAMMA	1.070E+03	GWET	3.190E-01	9.552E-02	Be7				1.030E-01	PCI/GWET	11/19/97
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00367176H	GAMMA	1.070E+03	GWET	3.190E-01	9.552E-02	Ce141				3.270E-02	PCI/GWET	11/19/97
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00367176H	GAMMA	1.070E+03	GWET	3.190E-01	9.552E-02	Ce144				2.860E-02	PCI/GWET	11/19/97
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00367176H	GAMMA	1.070E+03	GWET	3.190E-01	9.552E-02	Co58				1.240E-02	PCI/GWET	11/19/97
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00367176H	GAMMA	1.070E+03	GWET	3.190E-01	9.552E-02	Co60				7.050E-03	PCI/GWET	11/19/97
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00367176H	GAMMA	1.070E+03	GWET	3.190E-01	9.552E-02	Cs134				6.410E-03	PCI/GWET	11/19/97
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00367176H	GAMMA	1.070E+03	GWET	3.190E-01	9.552E-02	Cs137	3.800E-03		2.400E-03			
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00367176H	GAMMA	1.070E+03	GWET	3.190E-01	9.552E-02	Eu152				1.290E-02	PCI/GWET	11/19/97
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00367176H	GAMMA	1.070E+03	GWET	3.190E-01	9.552E-02	Eu154				3.400E-02	PCI/GWET	11/19/97
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00367176H	GAMMA	1.070E+03	GWET	3.190E-01	9.552E-02	Fe59				4.690E-02	PCI/GWET	11/19/97
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00367176H	GAMMA	1.070E+03	GWET	3.190E-01	9.552E-02	I131				4.460E+00	PCI/GWET	11/19/97
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00367176H	GAMMA	1.070E+03	GWET	3.190E-01	9.552E-02	K40	2.770E+00		8.700E-02			
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00367176H	GAMMA	1.070E+03	GWET	3.190E-01	9.552E-02	La140				2.120E-02	PCI/GWET	11/19/97
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00367176H	GAMMA	1.070E+03	GWET	3.190E-01	9.552E-02	Mn54				6.370E-03	PCI/GWET	11/19/97
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00367176H	GAMMA	1.070E+03	GWET	3.190E-01	9.552E-02	Mo99				3.250E+00	PCI/GWET	11/19/97
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00367176H	GAMMA	1.070E+03	GWET	3.190E-01	9.552E-02	Na22				8.020E-03	PCI/GWET	11/19/97
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00367176H	GAMMA	1.070E+03	GWET	3.190E-01	9.552E-02	Nb95				1.240E-02	PCI/GWET	11/19/97

97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00367680V	GAMMA	1.020E+03	GWET	2.552E-01	4.439E-02	Mo99						3.500E+00	PCI/GWET	12/09/97
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00367680V	GAMMA	1.020E+03	GWET	2.552E-01	4.439E-02	Na22						9.190E-03	PCI/GWET	12/09/97
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00367680V	GAMMA	1.020E+03	GWET	2.552E-01	4.439E-02	Nb95						1.250E-02	PCI/GWET	12/09/97
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00367680V	GAMMA	1.020E+03	GWET	2.552E-01	4.439E-02	Pr144						5.300E-01	PCI/GWET	12/09/97
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00367680V	GAMMA	1.020E+03	GWET	2.552E-01	4.439E-02	Ra226	5.500E-02	UJ	7.700E-02				PCI/GWET	12/09/97
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00367680V	GAMMA	1.020E+03	GWET	2.552E-01	4.439E-02	Ra228						2.200E-02	PCI/GWET	12/09/97
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00367680V	GAMMA	1.020E+03	GWET	2.552E-01	4.439E-02	Ru103						1.850E-02	PCI/GWET	12/09/97
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00367680V	GAMMA	1.020E+03	GWET	2.552E-01	4.439E-02	Ru106						6.290E-02	PCI/GWET	12/09/97
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00367680V	GAMMA	1.020E+03	GWET	2.552E-01	4.439E-02	Sb125						3.000E-02	PCI/GWET	12/09/97
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00367680V	GAMMA	1.020E+03	GWET	2.552E-01	4.439E-02	Zn65						2.230E-02	PCI/GWET	12/09/97
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00367680V	GAMMA	1.020E+03	GWET	2.552E-01	4.439E-02	Zr95						2.240E-02	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Am241						2.940E-02	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Ba140						1.060E+00	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Be7						1.350E-01	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Ce141						2.720E-02	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Ce144						3.070E-02	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Co58						1.570E-02	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Co60						1.170E-02	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Cs134						7.280E-03	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Cs137	6.800E-03		3.300E-03				PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Eu152						1.720E-02	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Eu154						5.340E-02	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Fe59						5.650E-02	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	I131						2.540E+00	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	K40	3.220E+00		1.400E-01				PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	La140						2.890E-02	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Mn54						7.820E-03	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Mo99						3.550E+00	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Na22						1.180E-02	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Nb95						1.530E-02	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Pb212	3.600E-03	U	6.300E-03				PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Pr144						5.680E-01	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Ra226						1.060E-01	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Ra228						3.220E-02	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Ru103						2.110E-02	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Ru106						7.450E-02	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Sb125						4.000E-02	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Zn65						3.150E-02	PCI/GWET	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00367179L	GAMMA	1.060E+03	GWET	2.549E-01	4.436E-02	Zr95						3.010E-02	PCI/GWET	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00367180D	GAMMA	1.020E+03	GWET	3.238E-01	3.249E-02	Am241						2.540E-02	PCI/GWET	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00367180D	GAMMA	1.020E+03	GWET	3.238E-01	3.249E-02	Ba140						8.870E-01	PCI/GWET	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00367180D	GAMMA	1.020E+03	GWET	3.238E-01	3.249E-02	Be7						1.050E-01	PCI/GWET	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00367180D	GAMMA	1.020E+03	GWET	3.238E-01	3.249E-02	Ce141						2.540E-02	PCI/GWET	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00367180D	GAMMA	1.020E+03	GWET	3.238E-01	3.249E-02	Ce144						3.070E-02	PCI/GWET	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00367180D	GAMMA	1.020E+03	GWET	3.238E-01	3.249E-02	Co58						1.110E-02	PCI/GWET	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00367180D	GAMMA	1.020E+03	GWET	3.238E-01	3.249E-02	Co60						8.600E-03	PCI/GWET	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00367180D	GAMMA	1.020E+03	GWET	3.238E-01	3.249E-02	Cs134						6.290E-03	PCI/GWET	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00367180D	GAMMA	1.020E+03	GWET	3.238E-01	3.249E-02	Cs137	5.100E-03		2.900E-03			1.400E-02	PCI/GWET	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00367180D	GAMMA	1.020E+03	GWET	3.238E-01	3.249E-02	Eu152						3.870E-02	PCI/GWET	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00367180D	GAMMA	1.020E+03	GWET	3.238E-01	3.249E-02	Eu154						4.330E-02	PCI/GWET	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00367180D	GAMMA	1.020E+03	GWET	3.238E-01	3.249E-02	Fe59						1.990E+00	PCI/GWET	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00367180D	GAMMA	1.020E+03	GWET	3.238E-01	3.249E-02	K40	2.750E+00		1.000E-01				PCI/GWET	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00367180D	GAMMA	1.020E+03	GWET	3.238E-01	3.249E-02	La140						2.320E-02	PCI/GWET	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00367180D	GAMMA	1.020E+03	GWET	3.238E-01	3.249E-02	Mn54						6.700E-03	PCI/GWET	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00367180D	GAMMA	1.020E+03	GWET	3.238E-01	3.249E-02	Mo99						3.410E+00	PCI/GWET	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00367180D	GAMMA	1.020E+03	GWET	3.238E-01	3.249E-02	Na22						8.930E-03	PCI/GWET	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00367180D	GAMMA	1.020E+03	GWET	3.238E-01	3.249E-02	Nb95						1.150E-02	PCI/GWET	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00367180D	GAMMA	1.020E+03	GWET	3.238E-01	3.24									

97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Co58				9.300E-03	PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Co60				6.830E-03	PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Cs134				6.410E-03	PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Cs137	3.600E-03		2.100E-03		PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Eu152				1.260E-02	PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Eu154				3.620E-02	PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Fe59				3.510E-02	PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	I131				1.710E+00	PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	K40	1.720E+00		7.300E-02		PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	La140				1.990E-02	PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Mn54				6.270E-03	PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Mo99				2.970E+00	PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Na22				7.620E-03	PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Nb95				9.820E-03	PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Pb212	3.800E-03	U	4.700E-03		PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Pr144				4.160E-01	PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Ra226				8.230E-02	PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Ra228				1.910E-02	PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Ru103				1.450E-02	PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Ru106				5.200E-02	PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Sb125				2.720E-02	PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Ti208	2.400E-03	U	3.100E-03		PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Zn65				1.930E-02	PCI/GWET	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00367681W	GAMMA	1.030E+03	GWET	3.074E-01	7.221E-02	Zr95				1.720E-02	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Am241				3.080E-02	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Ba140				6.330E-01	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Be7				8.950E-02	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Ce141				2.680E-02	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Ce144				2.850E-02	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Co58				1.010E-02	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Co60				6.650E-03	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Cs134				5.780E-03	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Cs137				5.140E-03	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Eu152				1.390E-02	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Eu154				3.380E-02	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Fe59				3.330E-02	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	I131				1.450E+00	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	K40	1.880E+00		8.200E-02		PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	La140				1.970E-02	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Mn54				6.510E-03	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Mo99				3.900E+00	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Na22				8.070E-03	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Nb95				9.740E-03	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Pb214	6.800E-03	U	7.400E-03		PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Pr144				4.050E-01	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Ra226				9.070E-02	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Ra228				2.050E-02	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Ru103				1.460E-02	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Ru106				5.100E-02	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Sb125				3.060E-02	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Zn65				1.750E-02	PCI/GWET	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00367182F	GAMMA	1.040E+03	GWET	2.402E-01	7.332E-02	Zr95				1.850E-02	PCI/GWET	12/12/97
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00367183G	GAMMA	1.040E+03	GWET	2.602E-01	9.139E-02	Am241				2.740E-02	PCI/GWET	12/12/97
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00367183G	GAMMA	1.040E+03	GWET	2.602E-01	9.139E-02	Ba140				6.730E-01	PCI/GWET	12/12/97
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00367183G	GAMMA	1.040E+03	GWET	2.602E-01	9.139E-02	Be7				9.130E-02	PCI/GWET	12/12/97
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00367183G	GAMMA	1.040E+03	GWET	2.602E-01	9.139E-02	Ce141				2.250E-02	PCI/GWET	12/12/97
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00367183G	GAMMA	1.040E+03	GWET	2.602E-01	9.139E-02	Ce144				2.830E-02	PCI/GWET	12/12/97
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00367183G	GAMMA	1.040E+03	GWET	2.602E-01	9.139E-02	Co58				1.040E-02	PCI/GWET	12/12/97
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00367183G	GAMMA	1.040E+03	GWET	2.602E-01	9.139E-02	Co60				7.220E-03	PCI/GWET	12/12/97
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00367183G	GAMMA	1.040E+03	GWET	2.602E-01	9.139E-02	Cs134				6.380E-03	PCI/GWET	

97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00367183G	GAMMA	1.040E+03	GWET	2.602E-01	9.139E-02	Pb212	1.020E-02	5.600E-03			PCI/GWET	12/12/97	
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00367183G	GAMMA	1.040E+03	GWET	2.602E-01	9.139E-02	Pr144					4.360E-01	PCI/GWET	12/12/97
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00367183G	GAMMA	1.040E+03	GWET	2.602E-01	9.139E-02	Ra226					8.730E-02	PCI/GWET	12/12/97
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00367183G	GAMMA	1.040E+03	GWET	2.602E-01	9.139E-02	Ra228					2.010E-02	PCI/GWET	12/12/97
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00367183G	GAMMA	1.040E+03	GWET	2.602E-01	9.139E-02	Ru103					1.490E-02	PCI/GWET	12/12/97
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00367183G	GAMMA	1.040E+03	GWET	2.602E-01	9.139E-02	Ru106					5.600E-02	PCI/GWET	12/12/97
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00367183G	GAMMA	1.040E+03	GWET	2.602E-01	9.139E-02	Sb125					3.200E-02	PCI/GWET	12/12/97
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00367183G	GAMMA	1.040E+03	GWET	2.602E-01	9.139E-02	Zn65					1.750E-02	PCI/GWET	12/12/97
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00367183G	GAMMA	1.040E+03	GWET	2.602E-01	9.139E-02	Zr95					1.940E-02	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Am241					1.900E-02	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Ba140					5.820E-01	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Be7					6.570E-02	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Ce141					1.870E-02	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Ce144					2.330E-02	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Co58					7.350E-03	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Co60					4.880E-03	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Cs134					4.410E-03	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Cs137	4.000E-03	1.900E-03				PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Eu152					1.000E-02	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Eu154					2.610E-02	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Fe59					2.660E-02	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	I131					1.360E+00	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	K40	1.930E+00	6.300E-02				PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	La140					1.530E-02	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Mn54					4.630E-03	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Mo99					2.700E+00	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Na22					5.550E-03	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Nb95					8.450E-03	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Pb212	2.900E-03	U	4.800E-03			PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Pb214	4.900E-03		4.600E-03			PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Pr144					3.410E-01	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Ra226	3.300E-02	UJ	5.700E-02			PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Ra228					1.380E-02	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Ru103					1.180E-02	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Ru106					4.270E-02	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Sb125					2.270E-02	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Zn65					1.300E-02	PCI/GWET	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00367682X	GAMMA	1.050E+03	GWET	3.003E-01	7.175E-02	Zr95					1.430E-02	PCI/GWET	12/12/97

Client ID	Matrix	NAREL ID	Collect Start	Collect End	Ana. ID	QC	Procedure	Aliquot	Unit	Dry/Wet	Ash/Dry	Analyte	Conc.	Data	2*CSU	MDC	Unit	Res Date
														Qualifiers				
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00383396M		PU	2.556E-01	GASH	3.134E-01	9.541E-02	Pu238	-9.000E-04	U	4.600E-03	1.068E-02	PCI/GDRY	03/08/99
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00383396M		PU	2.556E-01	GASH	3.134E-01	9.541E-02	Pu239	6.000E-04	U	2.700E-03	6.411E-03	PCI/GDRY	03/08/99
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00383396M		PU	2.556E-01	GASH	3.134E-01	9.541E-02	Yield	8.440E+01		6.600E+00	%		03/08/99
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00383400P		PU	2.509E-01	GASH	2.896E-01	6.455E-02	Pu238	2.700E-03	U	7.100E-03	1.300E-02	PCI/GDRY	03/08/99
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00383400P		PU	2.509E-01	GASH	2.896E-01	6.455E-02	Pu239	2.200E-03	U	3.100E-03	5.089E-03	PCI/GDRY	03/08/99
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00383400P		PU	2.509E-01	GASH	2.896E-01	6.455E-02	Yield	6.610E+01		5.600E+00	%		03/08/99
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00383405V		PU	2.595E-01	GASH	2.979E-01	6.158E-02	Pu238	2.000E-04	U	4.800E-03	1.026E-02	PCI/GDRY	03/08/99
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00383405V		PU	2.595E-01	GASH	2.979E-01	6.158E-02	Pu239	-8.000E-04	U	2.900E-03	8.083E-03	PCI/GDRY	03/08/99
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00383405V		PU	2.595E-01	GASH	2.979E-01	6.158E-02	Yield	5.540E+01		5.100E+00	%		03/08/99
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00383409Z		PU	2.591E-01	GASH	2.945E-01	6.258E-02	Pu238	0.000E+00	U	3.200E-03	6.889E-03	PCI/GDRY	03/08/99
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00383409Z		PU	2.591E-01	GASH	2.945E-01	6.258E-02	Pu239	-2.000E-04	U	1.900E-03	4.928E-03	PCI/GDRY	03/08/99
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00383409Z		PU	2.591E-01	GASH	2.945E-01	6.258E-02	Yield	8.290E+01		6.400E+00	%		03/08/99
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00383413V		PU	2.762E-01	GASH	3.190E-01	9.552E-02	Pu238	2.900E-03	U	6.000E-03	1.104E-02	PCI/GDRY	03/08/99
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00383413V		PU	2.762E-01	GASH	3.190E-01	9.552E-02	Pu239	3.500E-03	U	3.900E-03	4.990E-03	PCI/GDRY	03/08/99
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00383413V		PU	2.762E-01	GASH	3.190E-01	9.552E-02	Yield	7.060E+01		5.900E+00	%		03/08/99
97500965	FISH	98.00664H	12/09/1997 00:00	12/09/1997 00:00	00383417Z		PU	2.747E-01	GASH	2.530E-01	4.222E-02	Pu238	-2.300E-03	U	3.700E-03	8.631E-03	PCI/GDRY	03/08/99
97500965	FISH	98.00664H	12/09/1997 00:00	12/09/1997 00:00	00383417Z		PU	2.747E-01	GASH	2.530E-01	4.222E-02	Pu239	5.000E-04	U	1.600E-03	3.591E-03	PCI/GDRY	03/08/99
97500965	FISH	98.00664H	12/09/1997 00:00	12/09/1997 00:00	00383417Z		PU	2.747E-01	GASH	2.530E-01	4.222E-02	Yield	4.770E+01		4.300E+00	%		03/08/99
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00383422W		PU	2.664E-01	GASH	2.552E-01	4.439E-02	Pu238	4.000E-04	U	4.000E-03	8.197E-03	PCI/GDRY	03/08/99
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00383422W		PU	2.664E-01	GASH	2.552E-01	4.439E-02	Pu239	3.700E-03		3.200E-03	3.581E-03	PCI/GDRY	03/08/99
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00383422W		PU	2.664E-01	GASH	2.552E-01	4.439E-02	Yield	6.970E+01		6.400E+00	%		03/08/99
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00383426A		PU	2.581E-01	GASH	2.549E-01	4.436E-02	Pu238	0.000E+00	U	2.900E-03	6.254E-03	PCI/GDRY	03/04/99
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00383426A		PU	2.581E-01	GASH	2.549E-01	4.436E-02	Pu239	-2.000E-04	U	1.200E-03	3.754E-03	PCI/GDRY	03/04/99
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00383426A		PU	2.581E-01	GASH	2.549E-01	4.436E-02	Yield	6.640E+01		5.700E+00	%		03/04/99
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00383430W		PU	2.527E-01	GASH	3.238E-01	3.249E-02	Pu238	1.000E-03	U	4.500E-03	8.589E-03	PCI/GDRY	03/08/99
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00383430W		PU	2.527E-01	GASH	3.238E-01	3.249E-02	Pu239	3.300E-03	U	3.000E-03	3.950E-03	PCI/GDRY	03/08/99
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00383430W		PU	2.527E-01	GASH	3.238E-01	3.249E-02	Yield	4.920E+01		4.800E+00	%		03/08/99
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00383434A		PU	2.603E-01	GASH	3.074E-01	7.221E-02	Pu238	3.700E-03	U	6.500E-03	1.142E-02	PCI/GDRY	03/04/99
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00383434A		PU	2.603E-01	GASH	3.074E-01	7.221E-02	Pu239	3.300E-03	U	3.300E-03	4.470E-03	PCI/GDRY	03/04/99
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00383434A		PU	2.603E-01	GASH	3.074E-01	7.221E-02	Yield	8.120E+01		6.300E+00	%		03/04/99
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00383439F		PU	2.645E-01	GASH	2.402E-01	7.332E-02	Pu238	-1.900E-03	U	3.000E-03	8.224E-03	PCI/GDRY	03/04/99
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00383439F		PU	2.645E-01	GASH	2.402E-01	7.332E-02	Pu239	2.700E-03	U	3.800E-03	6.479E-03	PCI/GDRY	03/04/99
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00383439F		PU	2.645E-01	GASH	2.402E-01	7.332E-02	Yield	8.070E+01		6.400E+00	%		03/04/99
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00383443B		PU	2.739E-01	GASH	2.602E-01	9.139E-02	Pu238	7.500E-03	U	8.400E-03	1.323E-02	PCI/GDRY	03/04/99
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00383443B		PU	2.739E-01	GASH	2.602E-01	9.139E-02	Pu239	7.000E-04	U	4.200E-03	9.463E-03	PCI/GDRY	03/04/99
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00383443B		PU	2.739E-01	GASH	2.602E-01	9.139E-02	Yield	5.970E+01		5.300E+00	%		03/04/99
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00385888M	DUP	PU	2.649E-01	GASH	2.602E-01	9.139E-02	Pu238	2.500E-03		5.100E-03	9.403E-03	PCI/GDRY	03/04/99
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00385888M	DUP	PU	2.649E-01	GASH	2.602E-01	9.139E-02	Pu239	1.400E-03		2.400E-03	4.248E-03	PCI/GDRY	03/04/99
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00385888M	DUP	PU	2.649E-01	GASH	2.602E-01	9.139E-02	Yield	8.270E+01		6.400E+00	%		03/04/99
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00383447F		PU	2.737E-01	GASH	3.003E-01	7.175E-02	Pu238	-8.000E-04	U	4.400E-03	9.339E-03	PCI/GDRY	03/04/99
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00383447F		PU	2.737E-01	GASH	3.003E-01	7.175E-02	Pu239	6.000E-04	U	1.700E-03	3.886E-03	PCI/GDRY	03/04/99
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00383447F		PU	2.737E-01	GASH	3.003E-01	7.175E-02	Yield	7.520E+01		5.700E+00	%		03/04/99
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00385889N	MS	PU	2.539E-01	GASH	3.003E-01	7.175E-02	Pu238	-3.900E-03		4.700E-03	1.247E-02	PCI/GDRY	03/04/99
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00385889N	MS	PU	2.539E-01	GASH	3.003E-01	7.175E-02	Pu239	5.280E-01		6.400E-02	5.447E-03	PCI/GDRY	03/04/99
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00385889N	MS	PU	2.539E-01	GASH	3.003E-01	7.175E-02	Yield	7.770E+01		6.800E+00	%		03/04/99
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00385890F	MSD	PU	2.634E-01	GASH	3.003E-01	7.175E-02	Pu238	-8.000E-04		6.300E-03	1.307E-02	PCI/GDRY	03/04/99
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00385890F	MSD	PU	2.634E-01	GASH	3.003E-01	7.175E-02	Pu239	4.870E-01		5.700E-02	6.013E-03	PCI/GDRY	03/04/99
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00385890F	MSD	PU	2.634E-01	GASH	3.003E-01	7.175E-02	Yield	6.840E+01		5.800E+00	%		03/04/99

Client ID	Matrix	NAREL ID	Collect Start	Collect End	Ana. ID	QC	Procedure	Aliquot	Unit	Dry/Wet	Ash/Dry	Analyte	Conc.	2*CSU	MDC	Unit	Res Date
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00401400U		SR	5.000E-01	GASH	3.134E-01	9.541E-02	Sr89	-3.300E+03	5.100E+03	9.931E+03	PCI/GDRY	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00401400U		SR	5.000E-01	GASH	3.134E-01	9.541E-02	Sr90	9.000E-02	1.100E-01	1.856E-01	PCI/GDRY	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	401418	DUP	SR	5.010E-01	GASH	3.134E-01	9.541E-02	Sr89	1.400E+03	4.500E+03	7.895E+03	PCI/GDRY	11/19/97
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	401418	DUP	SR	5.010E-01	GASH	3.134E-01	9.541E-02	Sr90	4.000E-03	9.600E-02	1.758E-01	PCI/GDRY	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00401403X		SR	4.990E-01	GASH	2.896E-01	6.455E-02	Sr89	-1.600E+03	2.200E+03	4.387E+03	PCI/GDRY	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00401403X		SR	4.990E-01	GASH	2.896E-01	6.455E-02	Sr90	2.800E-02	5.100E-02	9.315E-02	PCI/GDRY	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00401420Y	MS	SR	5.000E-01	GASH	2.896E-01	6.455E-02	Sr89	1.400E+03	9.300E+03	1.562E+04	PCI/GDRY	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00401420Y	MS	SR	5.000E-01	GASH	2.896E-01	6.455E-02	Sr90	2.910E+00	2.200E-01	1.035E-01	PCI/GDRY	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00401425D	MSD	SR	5.000E-01	GASH	2.896E-01	6.455E-02	Sr89	4.100E+03	8.700E+03	1.447E+04	PCI/GDRY	11/19/97
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00401425D	MSD	SR	5.000E-01	GASH	2.896E-01	6.455E-02	Sr90	2.700E+00	2.000E-01	1.024E-01	PCI/GDRY	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00401404Y		SR	5.000E-01	GASH	2.979E-01	6.158E-02	Sr89	-2.200E+03	2.300E+03	4.604E+03	PCI/GDRY	11/19/97
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00401404Y		SR	5.000E-01	GASH	2.979E-01	6.158E-02	Sr90	1.170E-01	5.400E-02	8.063E-02	PCI/GDRY	11/19/97
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00401405Z		SR	5.000E-01	GASH	2.945E-01	6.258E-02	Sr89	1.900E+03	2.100E+03	3.751E+03	PCI/GDRY	11/19/97
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00401405Z		SR	5.000E-01	GASH	2.945E-01	6.258E-02	Sr90	-2.700E-02	4.900E-02	9.543E-02	PCI/GDRY	11/19/97
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00401406A		SR	5.000E-01	GASH	3.190E-01	9.552E-02	Sr89	-1.700E+03	5.100E+03	9.696E+03	PCI/GDRY	11/19/97
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00401406A		SR	5.000E-01	GASH	3.190E-01	9.552E-02	Sr90	5.000E-02	1.000E-01	1.859E-01	PCI/GDRY	11/19/97
97500965	FISH	98.00664H	12/09/1997 00:00	12/09/1997 00:00	00401407B		SR	5.000E-01	GASH	2.530E-01	4.222E-02	Sr89	2.000E+02	1.500E+03	2.677E+03	PCI/GDRY	12/09/97
97500965	FISH	98.00664H	12/09/1997 00:00	12/09/1997 00:00	00401407B		SR	5.000E-01	GASH	2.530E-01	4.222E-02	Sr90	-2.000E-03	4.100E-02	7.703E-02	PCI/GDRY	12/09/97
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00401408C		SR	5.020E-01	GASH	2.552E-01	4.439E-02	Sr89	-2.800E+03	2.400E+03	4.975E+03	PCI/GDRY	12/09/97
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00401408C		SR	5.020E-01	GASH	2.552E-01	4.439E-02	Sr90	9.800E-02	6.600E-02	1.104E-01	PCI/GDRY	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00401409D		SR	5.000E-01	GASH	2.549E-01	4.436E-02	Sr89	0.000E+00	2.400E+03	4.416E+03	PCI/GDRY	12/09/97
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00401409D		SR	5.000E-01	GASH	2.549E-01	4.436E-02	Sr90	3.000E-03	6.300E-02	1.159E-01	PCI/GDRY	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00401410W		SR	5.000E-01	GASH	3.238E-01	3.249E-02	Sr89	-3.400E+02	9.900E+02	1.936E+03	PCI/GDRY	12/09/97
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00401410W		SR	5.000E-01	GASH	3.238E-01	3.249E-02	Sr90	1.900E-02	2.700E-02	4.692E-02	PCI/GDRY	12/09/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00401413Z		SR	5.010E-01	GASH	3.074E-01	7.221E-02	Sr89	1.500E+03	3.200E+03	5.623E+03	PCI/GDRY	12/12/97
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00401413Z		SR	5.010E-01	GASH	3.074E-01	7.221E-02	Sr90	3.000E-03	8.200E-02	1.556E-01	PCI/GDRY	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00403945H		SR	5.010E-01	GASH	2.402E-01	7.332E-02	Sr89	-2.500E+03	2.900E+03	5.695E+03	PCI/GDRY	12/12/97
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00403945H		SR	5.010E-01	GASH	2.402E-01	7.332E-02	Sr90	6.700E-02	6.500E-02	1.170E-01	PCI/GDRY	12/12/97
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00401415B		SR	5.020E-01	GASH	2.602E-01	9.139E-02	Sr89	1.300E+03	2.500E+03	4.447E+03	PCI/GDRY	12/12/97
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00401415B		SR	5.020E-01	GASH	2.602E-01	9.139E-02	Sr90	-1.400E-02	6.900E-02	1.344E-01	PCI/GDRY	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00401419F		SR	5.020E-01	GASH	3.003E-01	7.175E-02	Sr89	-1.400E+03	2.000E+03	4.071E+03	PCI/GDRY	12/12/97
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00401419F		SR	5.020E-01	GASH	3.003E-01	7.175E-02	Sr90	5.500E-02	5.800E-02	1.007E-01	PCI/GDRY	12/12/97

Client ID	Matrix	NAREL ID	Collect Start	Collect End	Ana. ID	QC	Procedure	Aliquot	Unit	Dry/Wet	Ash/Dry	Analyte	Conc.	Data Qualifiers	2*CSU	MDC	Unit	Res Date
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00383397N		U	3.183E-01	GASH	3.134E-01	9.541E-02	U234	2.180E-02		8.200E-03	5.251E-03	PCI/GDRY	03/01/99
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00383397N		U	3.183E-01	GASH	3.134E-01	9.541E-02	U235	0.000E+00	U	2.800E-03	7.128E-03	PCI/GDRY	03/01/99
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00383397N		U	3.183E-01	GASH	3.134E-01	9.541E-02	U238	1.210E-02		6.100E-03	4.833E-03	PCI/GDRY	03/01/99
97470992	FISH	98.00659L	11/19/1997 00:00	11/19/1997 00:00	00383397N		U	3.183E-01	GASH	3.134E-01	9.541E-02	Yield	8.280E+01		5.300E+00		%	03/01/99
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00383401Q		U	2.527E-01	GASH	2.896E-01	6.455E-02	U234	1.230E-02		5.600E-03	4.194E-03	PCI/GDRY	03/01/99
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00383401Q		U	2.527E-01	GASH	2.896E-01	6.455E-02	U235	2.000E-03	U	2.800E-03	4.623E-03	PCI/GDRY	03/01/99
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00383401Q		U	2.527E-01	GASH	2.896E-01	6.455E-02	U238	3.000E-03	U	3.100E-03	4.488E-03	PCI/GDRY	03/01/99
97470993	FISH	98.00660D	11/19/1997 00:00	11/19/1997 00:00	00383401Q		U	2.527E-01	GASH	2.896E-01	6.455E-02	Yield	8.650E+01		5.400E+00		%	03/01/99
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00383406W		U	2.515E-01	GASH	2.979E-01	6.158E-02	U234	6.200E-03		4.400E-03	4.734E-03	PCI/GDRY	03/02/99
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00383406W		U	2.515E-01	GASH	2.979E-01	6.158E-02	U235	0.000E+00	U	2.500E-03	6.426E-03	PCI/GDRY	03/02/99
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00383406W		U	2.515E-01	GASH	2.979E-01	6.158E-02	U238	5.100E-03		3.900E-03	4.357E-03	PCI/GDRY	03/02/99
97470994	FISH	98.00661	11/19/1997 00:00	11/19/1997 00:00	00383406W		U	2.515E-01	GASH	2.979E-01	6.158E-02	Yield	7.500E+01		5.000E+00		%	03/02/99
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00383410R		U	2.513E-01	GASH	2.945E-01	6.258E-02	U234	9.500E-03		5.100E-03	4.496E-03	PCI/GDRY	03/02/99
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00383410R		U	2.513E-01	GASH	2.945E-01	6.258E-02	U235	7.000E-04	U	2.200E-03	4.956E-03	PCI/GDRY	03/02/99
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00383410R		U	2.513E-01	GASH	2.945E-01	6.258E-02	U238	3.900E-03	U	3.600E-03	4.811E-03	PCI/GDRY	03/02/99
97470995	FISH	98.00662F	11/19/1997 00:00	11/19/1997 00:00	00383410R		U	2.513E-01	GASH	2.945E-01	6.258E-02	Yield	7.860E+01		5.000E+00		%	03/02/99
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00383414W		U	2.595E-01	GASH	3.190E-01	9.552E-02	U234	1.870E-02		8.500E-03	7.117E-03	PCI/GDRY	03/02/99
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00383414W		U	2.595E-01	GASH	3.190E-01	9.552E-02	U235	3.100E-03		3.500E-03	3.054E-03	PCI/GDRY	03/02/99
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00383414W		U	2.595E-01	GASH	3.190E-01	9.552E-02	U238	1.810E-02		8.100E-03	5.187E-03	PCI/GDRY	03/02/99
97470996	FISH	98.00663G	11/19/1997 00:00	11/19/1997 00:00	00383414W		U	2.595E-01	GASH	3.190E-01	9.552E-02	Yield	8.520E+01		5.400E+00		%	03/02/99
97500965	FISH	98.00664H	12/09/1997 00:00	12/09/1997 00:00	00383418A		U	2.533E-01	GASH	2.530E-01	4.222E-02	U234	6.800E-03		3.700E-03	3.082E-03	PCI/GDRY	03/02/99
97500965	FISH	98.00664H	12/09/1997 00:00	12/09/1997 00:00	00383418A		U	2.533E-01	GASH	2.530E-01	4.222E-02	U235	-5.400E-04	U	6.300E-04	3.691E-03	PCI/GDRY	03/02/99
97500965	FISH	98.00664H	12/09/1997 00:00	12/09/1997 00:00	00383418A		U	2.533E-01	GASH	2.530E-01	4.222E-02	U238	1.800E-03	U	2.300E-03	3.796E-03	PCI/GDRY	03/02/99
97500965	FISH	98.00664H	12/09/1997 00:00	12/09/1997 00:00	00383418A		U	2.533E-01	GASH	2.530E-01	4.222E-02	Yield	7.070E+01		4.700E+00		%	03/02/99
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00383423X		U	2.565E-01	GASH	2.552E-01	4.439E-02	U234	9.300E-03		5.500E-03	5.579E-03	PCI/GDRY	03/02/99
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00383423X		U	2.565E-01	GASH	2.552E-01	4.439E-02	U235	3.700E-03	U	3.600E-03	4.145E-03	PCI/GDRY	03/02/99
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00383423X		U	2.565E-01	GASH	2.552E-01	4.439E-02	U238	2.700E-03	U	3.100E-03	4.531E-03	PCI/GDRY	03/02/99
97500966	FISH	98.00665J	12/09/1997 00:00	12/09/1997 00:00	00383423X		U	2.565E-01	GASH	2.552E-01	4.439E-02	Yield	5.090E+01		3.900E+00		%	03/02/99
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00383427B		U	2.583E-01	GASH	2.549E-01	4.436E-02	U234	6.700E-03		3.300E-03	2.549E-03	PCI/GDRY	03/02/99
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00383427B		U	2.583E-01	GASH	2.549E-01	4.436E-02	U235	1.600E-03	U	2.100E-03	3.316E-03	PCI/GDRY	03/02/99
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00383427B		U	2.583E-01	GASH	2.549E-01	4.436E-02	U238	2.400E-03	U	2.200E-03	2.963E-03	PCI/GDRY	03/02/99
97500967	FISH	98.00666K	12/09/1997 00:00	12/09/1997 00:00	00383427B		U	2.583E-01	GASH	2.549E-01	4.436E-02	Yield	7.510E+01		4.700E+00		%	03/02/99
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00383431X		U	2.525E-01	GASH	3.238E-01	3.249E-02	U234	5.700E-03	U	4.400E-03	6.033E-03	PCI/GDRY	03/02/99
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00383431X		U	2.525E-01	GASH	3.238E-01	3.249E-02	U235	1.300E-03	U	1.800E-03	1.949E-03	PCI/GDRY	03/02/99
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00383431X		U	2.525E-01	GASH	3.238E-01	3.249E-02	U238	9.000E-04	U	1.600E-03	2.817E-03	PCI/GDRY	03/02/99
97500968	FISH	98.00667L	12/09/1997 00:00	12/09/1997 00:00	00383431X		U	2.525E-01	GASH	3.238E-01	3.249E-02	Yield	5.820E+01		4.600E+00		%	03/02/99
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00383435B		U	2.637E-01	GASH	3.074E-01	7.221E-02	U234	5.700E-02		1.300E-02	4.501E-03	PCI/GDRY	03/02/99
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00383435B		U	2.637E-01	GASH	3.074E-01	7.221E-02	U235	4.000E-03	U	4.400E-03	6.638E-03	PCI/GDRY	03/02/99
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00383435B		U	2.637E-01	GASH	3.074E-01	7.221E-02	U238	4.200E-02		1.100E-02	4.890E-03	PCI/GDRY	03/02/99
97500969	FISH	98.00668M	12/12/1997 00:00	12/12/1997 00:00	00383435B		U	2.637E-01	GASH	3.074E-01	7.221E-02	Yield	8.140E+01		5.200E+00		%	03/02/99
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00383440Y		U	2.540E-01	GASH	2.402E-01	7.332E-02	U234	3.600E-02		1.100E-02	4.149E-03	PCI/GDRY	03/02/99
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00383440Y		U	2.540E-01	GASH	2.402E-01	7.332E-02	U235	3.500E-03	U	4.500E-03	7.067E-03	PCI/GDRY	03/02/99
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00383440Y		U	2.540E-01	GASH	2.402E-01	7.332E-02	U238	2.370E-02		9.100E-03	5.901E-03	PCI/GDRY	03/02/99
97500970	FISH	98.00669N	12/12/1997 00:00	12/12/1997 00:00	00383440Y		U	2.540E-01	GASH	2.402E-01	7.332E-02	Yield	7.020E+01		4.700E+00		%	03/02/99
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00383444C		U	2.559E-01	GASH	2.602E-01	9.139E-02	U234	7.300E-02		1.600E-02	6.910E-03	PCI/GDRY	03/01/99
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00383444C		U	2.559E-01	GASH	2.602E-01	9.139E-02	U235	4.000E-03	U	4.000E-03	2.965E-03	PCI/GDRY	03/01/99
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00383444C		U	2.559E-01	GASH	2.602E-01	9.139E-02	U238	3.700E-02		1.100E-02	5.036E-03	PCI/GDRY	03/01/99
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00383444C		U	2.559E-01	GASH	2.602E-01	9.139E-02	Yield	8.520E+01		5.400E+00		%	03/01/99
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00385884H	DUP	U	2.590E-01	GASH	2.602E-01	9.139E-02	U234	6.100E-02		1.500E-02	5.586E-03	PCI/GDRY	03/01/99
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00385884H	DUP	U	2.590E-01	GASH	2.602E-01	9.139E-02	U235	4.900E-03		5.000E-03	6.689E-03	PCI/GDRY	03/01/99
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00385884H	DUP	U	2.590E-01	GASH	2.602E-01	9.139E-02	U238	4.800E-02		1.300E-02	6.878E-03	PCI/GDRY	03/01/99
97500971	FISH	98.00670F	12/12/1997 00:00	12/12/1997 00:00	00385884H	DUP	U	2.590E-01	GASH	2.602E-01	9.139E-02	Yield	8.260E+01		5.200E+00		%	03/01/99
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00383448G		U	2.672E-01	GASH	3.003E-01	7.175E-02	U234	6.100E-02		1.300E-02	5.163E-03	PCI/GDRY	03/01/99
97500972	FISH	98.00671G	12/12/1997 00:00	12/12/1997 00:00	00383448G		U	2.672E-01	GASH	3.003E-01	7.175E-02	U235	3.400E-03	U	3.400E-03	3.836E-03	PCI/GDRY	03/01/99
97500972																		

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	3200	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	15972-60-8	Alachlor	1300	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	834-12-8	Ametryn	360	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	1610-17-9	Atraton	1100	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	1912-24-9	Atrazine	360	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	580	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	580	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	1861-40-1	Benefin	540	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	720	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	314-40-9	Bromacil	1400	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	23184-66-9	Butachlor	1200	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	2008-41-5	Butylate	720	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	2425-06-1	Captafol	470	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	133-06-2	Captan	360	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	786-19-6	Carbophenothion	360	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	1400	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	10	ug/kg	J
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	250	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	720	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	56-72-4	Coumaphos	430	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	21725-46-2	Cyanazine	540	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	1134-23-2	Cycloate	720	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	1897-45-6	Daconil	860	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	91	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	78-48-8	DEF	500	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	2302-16-4	Diallate-I	1400	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	333-41-5	Diazinon	290	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	860	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	62-73-7	Dichlorvos	290	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	60-57-1	Dieldrin	6.6	ug/kg	J
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	60-51-5	Dimethoate	290	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	78-34-2	Dioxathion	610	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	957-51-7	Diuronamid	1100	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	330-54-1	Diuron	2200	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	959-98-8	Endosulfan I	7.7	ug/kg	NJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	4.5	ug/kg	NJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	72-20-8	Endrin	15	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	15	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	15	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	2104-64-5	EPN	360	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	759-94-4	Eptam	720	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	540	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	563-12-2	Ethion	250	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	13194-48-4	Ethoprop	290	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	60168-88-9	Fenarimol	1100	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	250	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	115-90-2	Fensulfothion	360	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	1400	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	944-22-9	Fonophos	220	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	961-11-5	Gardona	720	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	51235-04-2	Hexazinone	540	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	732-11-6	Imidan	400	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	121-75-5	Malathion	290	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	2400	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	51218-45-2	Metholachlor	1400	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	72-43-5	Methoxychlor	150	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	21087-64-9	Metribuzin	360	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	7786-34-7	Mevinphos	360	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	113-48-4	MGK-264	2500	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	2212-67-1	Molinate	720	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	15299-99-7	Napropamide	1100	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	27314-13-2	Norflurazon	720	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	650	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	1400	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	56-38-2	Parathion	290	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	250	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	1114-71-2	Pebulate	720	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	540	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	297-99-4	Phosphamidan	860	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	26399-36-0	Profluralin	860	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	1610-18-0	Prometon	360	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	7287-19-6	Prometryne	360	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	1400	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	860	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	2312-35-8	Propargite	720	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	139-40-2	Propazine	360	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	31218-83-4	Propetamphos	720	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	299-84-3	Ronnel	250	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	122-34-9	Simazine	360	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	3689-24-5	Sulfotep	220	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	360	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	43121-43-3	Triademefon	940	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	2303-17-5	Triallate	940	ug/kg	UJ
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	1582-09-8	Trifluralin	540	ug/kg	U
96254770	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	21.4	EPA 8085	AED-Pest	1929-77-7	Vernolate	720	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	3000	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	15972-60-8	Alachlor	1200	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	834-12-8	Ametryn	330	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	1610-17-9	Atraton	1000	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	1912-24-9	Atrazine	330	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	530	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	530	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	1861-40-1	Benefin	500	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	660	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	314-40-9	Bromacil	1300	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	23184-66-9	Butachlor	1200	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	2008-41-5	Butylate	660	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	2425-06-1	Captafol	325	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	133-06-2	Captan	250	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	786-19-6	Carbophenothion	330	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	1300	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	13.3	ug/kg	J
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	230	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	56-72-4	Coumaphos	400	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	21725-46-2	Cyanazine	500	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	1134-23-2	Cycloate	660	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	1897-45-6	Daconil	800	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	63	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	78-48-8	DEF	460	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	2302-16-4	Diallate-I	1300	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	333-41-5	Diazinon	260	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	800	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	62-73-7	Dichlorvos	260	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	60-57-1	Dieldrin	4.9	ug/kg	J
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	60-51-5	Dimethoate	260	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	78-34-2	Dioxathion	560	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	957-51-7	Diphenamid	1000	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	330-54-1	Diuron	2000	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	959-98-8	Endosulfan I	4.8	ug/kg	NJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	10	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	72-20-8	Endrin	10	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	10	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	10	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	2104-64-5	EPN	330	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	759-94-4	Eptam	660	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	500	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	563-12-2	Ethion	230	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	13194-48-4	Ethoprop	260	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	60168-88-9	Fenarimol	1000	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	230	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	115-90-2	Fensulfothion	330	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	500	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	944-22-9	Fonophos	200	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	961-11-5	Gardona	660	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	51235-04-2	Hexazinone	500	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	732-11-6	Imidan	360	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	121-75-5	Malathion	260	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	2200	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	51218-45-2	Metholachlor	1300	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	72-43-5	Methoxychlor	170	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	21087-64-9	Metribuzin	330	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	7786-34-7	Mevinphos	330	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	113-48-4	MGK-264	2300	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	2212-67-1	Molinate	660	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	15299-99-7	Napropamide	1000	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	27314-13-2	Norflurazon	660	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	600	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	1300	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	56-38-2	Parathion	260	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	230	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	1114-71-2	Pebulate	660	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	500	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	297-99-4	Phosphamidan	800	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	26399-36-0	Profluralin	800	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	1610-18-0	Prometon	330	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	7287-19-6	Prometryne	330	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	1300	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	800	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	2312-35-8	Propargite	660	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	139-40-2	Propazine	330	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	31218-83-4	Propetamphos	660	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	299-84-3	Ronnel	230	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	122-34-9	Simazine	330	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	3689-24-5	Sulfotep	200	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	330	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	43121-43-3	Triademefon	860	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	2303-17-5	Triallate	860	ug/kg	UJ
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	1582-09-8	Trifluralin	500	ug/kg	U
96254771	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	19.6	EPA 8085	AED-Pest	1929-77-7	Vernolate	660	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2400	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	15972-60-8	Alachlor	940	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	834-12-8	Ametryn	260	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	1610-17-9	Atraton	780	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	1912-24-9	Atrazine	260	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	420	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	420	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	1861-40-1	Benefin	390	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	520	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	314-40-9	Bromacil	1000	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	23184-66-9	Butachlor	910	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	2008-41-5	Butylate	520	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	2425-06-1	Captafol	330	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	133-06-2	Captan	260	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	786-19-6	Carbophenothion	260	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	1000	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	12	ug/kg	J
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	180	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	260	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	56-72-4	Coumaphos	310	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	21725-46-2	Cyanazine	390	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	1134-23-2	Dacloate	520	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	1897-45-6	Daconil	630	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	130	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	78-48-8	DEF	360	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	2302-16-4	Diallate-I	990	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	333-41-5	Diazinon	210	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	630	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	62-73-7	Dichlorvos	210	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	60-57-1	Dieldrin	5	ug/kg	J
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	60-51-5	Dimethoate	210	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	78-34-2	Dioxathion	440	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	957-51-7	Diphenamid	780	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	330-54-1	Diuron	1600	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	959-98-8	Endosulfan I	6.9	ug/kg	NJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	2.9	ug/kg	NJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	72-20-8	Endrin	11	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	11	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	11	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	2104-64-5	EPN	260	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	759-94-4	Eptam	520	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	390	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	563-12-2	Ethion	180	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	13194-48-4	Ethoprop	210	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	60168-88-9	Fenarimol	780	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	180	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	115-90-2	Fensulfothion	260	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	500	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	944-22-9	Fonophos	160	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	961-11-5	Gardona	520	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	51235-04-2	Hexazinone	400	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	732-11-6	Imidan	290	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	121-75-5	Malathion	210	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	1800	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	51218-45-2	Metholachlor	1000	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	72-43-5	Methoxychlor	130	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	21087-64-9	Metribuzin	260	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	7786-34-7	Mevinphos	260	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	113-48-4	MGK-264	1800	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	2212-67-1	Molinate	520	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	15299-99-7	Napropamide	780	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	27314-13-2	Norflurazon	520	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	470	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	1000	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	56-38-2	Parathion	210	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	180	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	1114-71-2	Pebulate	520	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	390	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	297-99-4	Phosphamidan	630	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	26399-36-0	Profluralin	600	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	1610-18-0	Prometon	260	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	7287-19-6	Prometryne	260	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	1000	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	630	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	2312-35-8	Propargite	520	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	139-40-2	Propazine	260	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	31218-83-4	Propetamphos	520	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	299-84-3	Ronnel	180	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	122-34-9	Sulfazine	260	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	3689-24-5	Sulfotep	160	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	260	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	43121-43-3	Triademefon	680	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	2303-17-5	Triallate	680	ug/kg	UJ
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	1582-09-8	Trifluralin	390	ug/kg	U
96254772	6/20/1996	Pacific lamprey	WB	Willamette River	Columbia River	21		1	20		N	18.8	EPA 8085	AED-Pest	1929-77-7	Vernolate	520	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2190	ug/kg	UJ
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	834-12-8	Ametryn	244	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1912-24-9	Atrazine	244	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	390	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	390	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1861-40-1	Benefin	365	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	487	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	314-40-9	Bromacil	975	ug/kg	UJ
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	23184-66-9	Butachlor	853	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	2008-41-5	Butylate	487	ug/kg	UJ
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	2425-06-1	Captafol	731	ug/kg	UJ
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	133-06-2	Captan	487	ug/kg	UJ
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	975	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	170	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	975	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	56-72-4	Coumaphos	292	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	365	ug/kg	UJ
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1134-23-2	Cycloate	487	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1897-45-6	Daconil	585	ug/kg	UJ
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1022-22-6	DDMU	122	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	78-48-8	DEF	341	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	2302-16-4	Diallate-I	926	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	333-41-5	Diazinon	195	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	62-73-7	Dichlorvos	195	ug/kg	UJ
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	*90922	dicofol breakdown	585	ug/kg	UJ
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	60-57-1	Dieldrin	97.5	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	78-34-2	Dioxathion	414	ug/kg	UJ
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	957-51-7	Diphenamid	731	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	330-54-1	Diuron	1460	ug/kg	UJ
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	97.5	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	97.5	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	72-20-8	Endrin	97.5	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	97.5	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	97.5	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	2104-64-5	EPN	244	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	759-94-4	Eptam	487	ug/kg	UJ
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	365	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	563-12-2	Ethion	170	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	195	ug/kg	UJ
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	731	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	170	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	975	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	944-22-9	Fonophos	146	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	961-11-5	Gardona	487	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	732-11-6	Imidan	268	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	121-75-5	Malathion	195	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	975	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	122	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	170	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	244	ug/kg	UJ
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	113-48-4	MGK-264	1700	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	2212-67-1	Molinate	487	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	15299-99-7	Napropamide	731	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	975	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	56-38-2	Parathion	195	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	170	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1114-71-2	Pebulate	487	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	365	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	26399-36-0	Profluralin	585	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	7287-19-6	Prometryne	244	ug/kg	UJ
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	975	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	585	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	2312-35-8	Propargite	487	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	139-40-2	Propazine	244	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	487	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	299-84-3	Ronnel	170	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	122-34-9	Simazine	244	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	146	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	5902-51-2	Terbacil	731	ug/kg	UJ
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	244	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	43121-43-3	Triademefon	634	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	2303-17-5	Triallate	634	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	365	ug/kg	U
96284741	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1929-77-7	Vernolate	487	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2210	ug/kg	UJ
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	834-12-8	Ametryn	246	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1912-24-9	Atrazine	246	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	393	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	393	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1861-40-1	Benefin	369	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	492	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	314-40-9	Bromacil	983	ug/kg	UJ
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	23184-66-9	Butachlor	860	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	2008-41-5	Butylate	492	ug/kg	UJ
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	2425-06-1	Captafol	737	ug/kg	UJ
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	133-06-2	Captan	492	ug/kg	UJ
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	983	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	172	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	983	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	56-72-4	Coumaphos	295	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	369	ug/kg	UJ
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1134-23-2	Cycloate	492	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1897-45-6	Daconil	590	ug/kg	UJ
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1022-22-6	DDMU	123	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	78-48-8	DEF	344	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	2302-16-4	Diallate-I	934	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	333-41-5	Diazinon	197	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	62-73-7	Dichlorvos	197	ug/kg	UJ
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	*90922	dicofol breakdown	590	ug/kg	UJ
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	60-57-1	Dieldrin	98.3	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	78-34-2	Dioxathion	418	ug/kg	UJ
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	957-51-7	Diphenamid	737	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	330-54-1	Diuron	1470	ug/kg	UJ
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	98.3	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	98.3	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	72-20-8	Endrin	98.3	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	98.3	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	98.3	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	2104-64-5	EPN	246	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	759-94-4	Eptam	492	ug/kg	UJ
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	55283-68-6	Ethalffluralin (Sonalan)	369	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	563-12-2	Ethion	172	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	197	ug/kg	UJ
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	737	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	172	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	983	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	944-22-9	Fonophos	147	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	961-11-5	Gardona	492	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	732-11-6	Imidan	270	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	121-75-5	Malathion	197	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	983	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	123	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	172	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	246	ug/kg	UJ
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	113-48-4	MGK-264	1720	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	2212-67-1	Molinate	492	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	15299-99-7	Napropamide	737	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	983	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	56-38-2	Parathion	197	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	172	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1114-71-2	Pebulate	492	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	369	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	26399-36-0	Profluralin	590	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	7287-19-6	Prometryne	246	ug/kg	UJ
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	983	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	590	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	2312-35-8	Propargite	492	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	139-40-2	Propazine	246	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	492	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	299-84-3	Ronnel	172	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	122-34-9	Simazine	246	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	147	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	5902-51-2	Terbacil	737	ug/kg	UJ
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	246	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	43121-43-3	Triademefon	639	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	2303-17-5	Triallate	639	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	369	ug/kg	U
96284742	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.5	EPA 8085	AED-Pest	1929-77-7	Vernolate	492	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2220	ug/kg	UJ
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	834-12-8	Ametryn	246	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	1912-24-9	Atrazine	246	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	394	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	394	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	1861-40-1	Benefin	369	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	493	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	314-40-9	Bromacil	985	ug/kg	UJ
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	23184-66-9	Butachlor	862	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	2008-41-5	Butylate	493	ug/kg	UJ
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	2425-06-1	Captafol	739	ug/kg	UJ
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	133-06-2	Captan	493	ug/kg	UJ
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	985	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	172	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	985	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	56-72-4	Coumaphos	296	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	21725-46-2	Cyanazine	369	ug/kg	UJ
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	1134-23-2	Cycloate	493	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	1897-45-6	Daconil	591	ug/kg	UJ
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	1022-22-6	DDMU	123	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	78-48-8	DEF	345	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	2302-16-4	Diallate-I	936	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	333-41-5	Diazinon	197	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	62-73-7	Dichlorvos	197	ug/kg	UJ
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	*90922	dicofol breakdown	591	ug/kg	UJ
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	60-57-1	Dieldrin	98.5	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	78-34-2	Dioxathion	419	ug/kg	UJ
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	957-51-7	Diphenamid	739	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	330-54-1	Diuron	1480	ug/kg	UJ

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	959-98-8	Endosulfan I	98.5	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	98.5	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	72-20-8	Endrin	98.5	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	98.5	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	98.5	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	2104-64-5	EPN	246	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	759-94-4	Eptam	493	ug/kg	UJ
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	369	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	563-12-2	Ethion	172	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	13194-48-4	Ethoprop	197	ug/kg	UJ
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	60168-88-9	Fenarimol	739	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	172	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	985	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	944-22-9	Fonophos	148	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	961-11-5	Gardona	493	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	732-11-6	Imidan	271	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	121-75-5	Malathion	197	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	51218-45-2	Metholachlor	985	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	72-43-5	Methoxychlor	123	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	172	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	21087-64-9	Metribuzin	246	ug/kg	UJ
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	113-48-4	MGK-264	1720	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	2212-67-1	Molinate	493	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	15299-99-7	Napropamide	739	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	985	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	56-38-2	Parathion	197	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	172	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	1114-71-2	Pebulate	493	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	369	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	26399-36-0	Profluralin	591	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	7287-19-6	Prometryne	246	ug/kg	UJ
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	985	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	591	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	2312-35-8	Propargite	493	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	139-40-2	Propazine	246	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	31218-83-4	Propetamphos	493	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	299-84-3	Ronnel	172	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	122-34-9	Simazine	246	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	3689-24-5	Sulfotep	148	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	5902-51-2	Terbacil	739	ug/kg	UJ
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	246	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	43121-43-3	Triademefon	640	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	2303-17-5	Triallate	640	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	1582-09-8	Trifluralin	369	ug/kg	U
96284743	7/10/1996	Walleye	FS	Umatilla River	Columbia River	30	B	2	8		N	1.3	EPA 8085	AED-Pest	1929-77-7	Vernolate	493	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2160	ug/kg	UJ
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	834-12-8	Ametryn	240	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	1912-24-9	Atrazine	240	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	384	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	384	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	1861-40-1	Benefin	360	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	480	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	314-40-9	Bromacil	960	ug/kg	UJ
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	23184-66-9	Butachlor	840	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	2008-41-5	Butylate	480	ug/kg	UJ
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	2425-06-1	Captafol	720	ug/kg	UJ
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	133-06-2	Captan	480	ug/kg	UJ
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	960	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	168	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	960	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	56-72-4	Coumaphos	288	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	21725-46-2	Cyanazine	360	ug/kg	UJ
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	1134-23-2	Dacloate	480	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	1897-45-6	Daconil	576	ug/kg	UJ
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	1022-22-6	DDMU	120	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	78-48-8	DEF	336	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	2302-16-4	Diallate-I	912	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	333-41-5	Diazinon	192	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	62-73-7	Dichlorvos	192	ug/kg	UJ
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	*90922	dicofol breakdown	576	ug/kg	UJ
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	60-57-1	Dieldrin	96	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	78-34-2	Dioxathion	408	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	957-51-7	Diphenamid	720	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	330-54-1	Diuron	1440	ug/kg	UJ
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	959-98-8	Endosulfan I	96	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	96	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	72-20-8	Endrin	96	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	96	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	96	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	2104-64-5	EPN	240	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	759-94-4	Eptam	480	ug/kg	UJ
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	360	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	563-12-2	Ethion	168	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	13194-48-4	Ethoprop	192	ug/kg	UJ
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	60168-88-9	Fenarimol	720	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	168	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	960	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	944-22-9	Fonophos	144	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	961-11-5	Gardona	480	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	732-11-6	Imidan	264	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	121-75-5	Malathion	192	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	51218-45-2	Metholachlor	960	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	72-43-5	Methoxychlor	120	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	168	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	21087-64-9	Metribuzin	240	ug/kg	UJ
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	113-48-4	MGK-264	1680	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	2212-67-1	Molinate	480	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	15299-99-7	Napropamide	720	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	960	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	56-38-2	Parathion	192	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	168	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	1114-71-2	Pebulate	480	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	360	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	26399-36-0	Profluralin	576	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	7287-19-6	Prometryne	240	ug/kg	UJ
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	960	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	576	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	2312-35-8	Propargite	480	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	139-40-2	Propazine	240	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	31218-83-4	Propetamphos	480	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	299-84-3	Ronnel	168	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	122-34-9	Simazine	240	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	3689-24-5	Sulfotep	144	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	5902-51-2	Terbacil	720	ug/kg	UJ
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	240	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	43121-43-3	Triademefon	624	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	2303-17-5	Triallate	624	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	1582-09-8	Trifluralin	360	ug/kg	U
96284744	7/10/1996	Walleye	WB	Umatilla River	Columbia River	30	B	3	8		N	8	EPA 8085	AED-Pest	1929-77-7	Vernolate	480	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2200	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	15972-60-8	Alachlor	900	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	834-12-8	Ametryn	250	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1610-17-9	Atraton	750	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1912-24-9	Atrazine	250	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	400	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	400	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1861-40-1	Benefin	380	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	500	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	314-40-9	Bromacil	1000	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	23184-66-9	Butachlor	880	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2008-41-5	Butylate	500	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2425-06-1	Captafol	325	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	133-06-2	Captan	250	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	786-19-6	Carbophenothion	250	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	1000	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	180	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	180	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	56-72-4	Coumaphos	300	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	380	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1134-23-2	Cycloate	500	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1897-45-6	Daconil	600	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	63	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	78-48-8	DEF	350	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2302-16-4	Diallate-I	950	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	333-41-5	Diazinon	200	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	300	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	62-73-7	Dichlorvos	200	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	60-57-1	Dieldrin	10	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	60-51-5	Dimethoate	200	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	78-34-2	Dioxathion	420	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	957-51-7	Diphenamid	750	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	330-54-1	Diuron	1500	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	10	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	10	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	72-20-8	Endrin	10	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	10	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	10	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2104-64-5	EPN	250	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	759-94-4	Eptam	500	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	380	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	563-12-2	Ethion	180	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	200	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	750	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	180	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	115-90-2	Fensulfothion	250	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	500	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	944-22-9	Fonophos	150	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	961-11-5	Gardona	500	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	51235-04-2	Hexazinone	375	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	732-11-6	Imidan	280	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	121-75-5	Malathion	200	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	1700	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	1000	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	120	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	250	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	7786-34-7	Mevinphos	250	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	113-48-4	MGK-264	1800	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2212-67-1	Molinate	500	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	15299-99-7	Napropamide	750	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	27314-13-2	Norflurazon	500	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	450	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	1000	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	56-38-2	Parathion	200	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	180	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1114-71-2	Pebulate	500	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	380	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	297-99-4	Phosphamidan	600	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	26399-36-0	Profluralin	600	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1610-18-0	Prometon	250	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	7287-19-6	Prometryne	250	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	1000	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	600	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2312-35-8	Propargite	500	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	139-40-2	Propazine	250	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	500	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	299-84-3	Ronnel	180	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	122-34-9	Simazine	250	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	150	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	250	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	43121-43-3	Triademefon	650	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2303-17-5	Triallate	650	ug/kg	UJ
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	380	ug/kg	U
96284795	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1929-77-7	Vernolate	500	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2200	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	15972-60-8	Alachlor	890	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	834-12-8	Ametryn	250	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1610-17-9	Atraton	740	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1912-24-9	Atrazine	250	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	400	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	400	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1861-40-1	Benefin	370	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	500	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	314-40-9	Bromacil	990	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	23184-66-9	Butachlor	870	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2008-41-5	Butylate	500	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2425-06-1	Captafol	740	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	133-06-2	Captan	250	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	786-19-6	Carbophenothion	250	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	990	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	170	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	170	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	56-72-4	Coumaphos	300	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	370	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1134-23-2	Cycloate	500	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1897-45-6	Daconil	590	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	60	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	78-48-8	DEF	350	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2302-16-4	Diallate-I	940	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	333-41-5	Diazinon	200	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	300	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	62-73-7	Dichlorvos	200	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	60-57-1	Dieldrin	10	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	60-51-5	Dimethoate	200	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	78-34-2	Dioxathion	420	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	957-51-7	Diphenamid	740	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	330-54-1	Diuron	1500	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	10	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	10	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	72-20-8	Endrin	10	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	10	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	10	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2104-64-5	EPN	250	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	759-94-4	Eptam	500	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	370	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	563-12-2	Ethion	170	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	200	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	740	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	170	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	115-90-2	Fensulfothion	250	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	500	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	944-22-9	Fonophos	150	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	961-11-5	Gardona	500	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	51235-04-2	Hexazinone	370	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	732-11-6	Imidan	270	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	121-75-5	Malathion	200	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	1700	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	990	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	120	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	250	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	7786-34-7	Mevinphos	250	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	113-48-4	MGK-264	1700	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2212-67-1	Molinate	500	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	15299-99-7	Napropamide	740	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	27314-13-2	Norflurazon	500	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	440	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	990	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	56-38-2	Parathion	200	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	170	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1114-71-2	Pebulate	500	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	370	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	297-99-4	Phosphamidan	590	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	26399-36-0	Profluralin	590	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1610-18-0	Prometon	250	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	7287-19-6	Prometryne	250	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	990	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	590	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2312-35-8	Propargite	500	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	139-40-2	Propazine	250	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	500	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	299-84-3	Ronnel	170	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	122-34-9	Simazine	250	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	150	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	250	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	43121-43-3	Triademefon	640	ug/kg	U
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	2303-17-5	Triallate	640	ug/kg	UJ
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	370	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96284796	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	3.5	EPA 8085	AED-Pest	1929-77-7	Vernolate	500	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2410	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	15972-60-8	Alachlor	964	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	834-12-8	Ametryn	268	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	1610-17-9	Atraton	803	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	1912-24-9	Atrazine	268	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	428	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	428	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	1861-40-1	Benefin	401	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	535	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	314-40-9	Bromacil	1070	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	23184-66-9	Butachlor	937	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	2008-41-5	Butylate	535	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	2425-06-1	Captafol	400	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	133-06-2	Captan	270	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	786-19-6	Carbophenothion	268	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	1070	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	187	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	187	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	270	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	56-72-4	Coumaphos	321	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	21725-46-2	Cyanazine	401	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	1134-23-2	Cycloate	535	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	1897-45-6	Daconil	642	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	65	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	78-48-8	DEF	375	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	2302-16-4	Diallate-I	1020	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	333-41-5	Diazinon	214	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	320	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	62-73-7	Dichlorvos	214	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	60-57-1	Dieldrin	5.2	ug/kg	J
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	60-51-5	Dimethoate	214	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	78-34-2	Dioxathion	455	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	957-51-7	Diphenamid	803	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	330-54-1	Diuron	1600	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	959-98-8	Endosulfan I	11	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	11	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	72-20-8	Endrin	11	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	11	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	11	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	2104-64-5	EPN	268	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	759-94-4	Eptam	535	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	401	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	563-12-2	Ethion	187	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	13194-48-4	Ethoprop	214	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	60168-88-9	Fenarimol	803	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	187	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	115-90-2	Fensulfothion	268	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	540	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	944-22-9	Fonophos	160	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	961-11-5	Gardona	535	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	51235-04-2	Hexazinone	401	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	732-11-6	Imidan	294	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	121-75-5	Malathion	214	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	1820	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	51218-45-2	Metholachlor	1070	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	72-43-5	Methoxychlor	134	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	21087-64-9	Metribuzin	268	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	7786-34-7	Mevinphos	268	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	113-48-4	MGK-264	1870	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	2212-67-1	Molinate	535	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	15299-99-7	Napropamide	803	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	27314-13-2	Norflurazon	535	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	482	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	1070	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	56-38-2	Parathion	214	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	187	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	1114-71-2	Pebulate	535	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	401	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	297-99-4	Phosphamidan	642	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	26399-36-0	Profluralin	642	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	1610-18-0	Prometon	268	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	7287-19-6	Prometryne	268	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	1070	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	642	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	2312-35-8	Propargite	535	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	139-40-2	Propazine	268	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	31218-83-4	Propetamphos	535	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	299-84-3	Ronnel	187	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	122-34-9	Simazine	268	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	3689-24-5	Sulfotep	160	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	268	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	43121-43-3	Triademefon	696	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	2303-17-5	Triallate	696	ug/kg	UJ
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	1582-09-8	Trifluralin	401	ug/kg	U
96284797	7/10/1996	Largescale Sucker	WB	Umatilla River	Columbia River	30	A	4	12		N	4.3	EPA 8085	AED-Pest	1929-77-7	Vernolate	535	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2030	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	15972-60-8	Alachlor	812	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	834-12-8	Ametryn	226	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	1610-17-9	Atraton	677	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	1912-24-9	Atrazine	226	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	361	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	361	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	1861-40-1	Benefin	338	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	451	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	314-40-9	Bromacil	902	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	23184-66-9	Butachlor	790	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	2008-41-5	Butylate	451	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	2425-06-1	Captafol	350	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	133-06-2	Captan	230	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	786-19-6	Carbophenothion	226	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	902	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	158	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	158	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	230	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	56-72-4	Coumaphos	271	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	21725-46-2	Cyanazine	338	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	1134-23-2	Cycloate	451	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	1897-45-6	Daconil	542	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	60	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	78-48-8	DEF	316	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	2302-16-4	Diallate-I	857	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	333-41-5	Diazinon	180	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	270	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	62-73-7	Dichlorvos	180	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	60-57-1	Dieldrin	11	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	60-51-5	Dimethoate	180	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	78-34-2	Dioxathion	384	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	957-51-7	Diphenamid	677	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	330-54-1	Diuron	1350	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	959-98-8	Endosulfan I	11	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	11	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	72-20-8	Endrin	11	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	11	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	11	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	2104-64-5	EPN	226	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	759-94-4	Eptam	451	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	338	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	563-12-2	Ethion	158	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	13194-48-4	Ethoprop	180	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	60168-88-9	Fenarimol	677	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	158	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	115-90-2	Fensulfothion	226	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	450	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	944-22-9	Fonophos	135	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	961-11-5	Gardona	451	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	51235-04-2	Hexazinone	338	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	732-11-6	Imidan	248	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	121-75-5	Malathion	180	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	57837-19-1	Metaxyl	1530	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	51218-45-2	Metholachlor	902	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	72-43-5	Methoxychlor	113	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	21087-64-9	Metribuzin	226	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	7786-34-7	Mevinphos	226	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	113-48-4	MGK-264	1580	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	2212-67-1	Molinate	451	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	15299-99-7	Napropamide	677	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	27314-13-2	Norflurazon	451	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	406	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	902	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	56-38-2	Parathion	180	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	158	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	1114-71-2	Pebulate	451	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	338	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	297-99-4	Phosphamidan	542	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	26399-36-0	Profluralin	542	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	1610-18-0	Prometon	226	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	7287-19-6	Prometryne	226	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	902	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	542	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	2312-35-8	Propargite	451	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	139-40-2	Propazine	226	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	31218-83-4	Propetamphos	451	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	299-84-3	Ronnel	158	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	122-34-9	Simazine	226	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	3689-24-5	Sulfotep	135	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	226	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	43121-43-3	Triademefon	587	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	2303-17-5	Triallate	587	ug/kg	UJ
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	1582-09-8	Trifluralin	338	ug/kg	U
96284798	7/10/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	5	4		N	1.2	EPA 8085	AED-Pest	1929-77-7	Vernolate	451	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2250	ug/kg	UJ
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	834-12-8	Ametryn	250	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	1912-24-9	Atrazine	250	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	400	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	400	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	1861-40-1	Benefin	375	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	500	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	314-40-9	Bromacil	1000	ug/kg	UJ
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	23184-66-9	Butachlor	875	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	2008-41-5	Butylate	500	ug/kg	UJ
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	2425-06-1	Captafol	750	ug/kg	UJ
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	133-06-2	Captan	500	ug/kg	UJ
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	1000	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	175	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	1000	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	56-72-4	Coumaphos	300	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	21725-46-2	Cyanazine	375	ug/kg	UJ
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	1134-23-2	Cycloate	500	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	1897-45-6	Daconil	600	ug/kg	UJ
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	1022-22-6	DDMU	125	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	78-48-8	DEF	350	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	2302-16-4	Diallate-I	950	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	333-41-5	Diazinon	200	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	62-73-7	Dichlorvos	200	ug/kg	UJ
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	*90922	dicolof breakdown	600	ug/kg	UJ
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	60-57-1	Dieldrin	100	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	78-34-2	Dioxathion	425	ug/kg	UJ
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	957-51-7	Diphenamid	750	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	330-54-1	Diuron	1500	ug/kg	UJ
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	959-98-8	Endosulfan I	100	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	100	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	72-20-8	Endrin	100	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	100	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	100	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	2104-64-5	EPN	250	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	759-94-4	Eptam	500	ug/kg	UJ
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	375	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	563-12-2	Ethion	175	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	13194-48-4	Ethoprop	200	ug/kg	UJ
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	60168-88-9	Fenarimol	750	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	175	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	1000	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	944-22-9	Fonophos	150	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	961-11-5	Gardona	500	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	732-11-6	Imidan	275	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	121-75-5	Malathion	200	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	51218-45-2	Metholachlor	1000	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	72-43-5	Methoxychlor	125	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	175	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	21087-64-9	Metribuzin	250	ug/kg	UJ
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	113-48-4	MGK-264	1750	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	2212-67-1	Molinate	500	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	15299-99-7	Napropamide	750	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	1000	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	56-38-2	Parathion	200	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	175	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	1114-71-2	Pebulate	500	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	375	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	26399-36-0	Profluralin	600	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	7287-19-6	Prometryne	250	ug/kg	UJ
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	1000	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	600	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	2312-35-8	Propargite	500	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	139-40-2	Propazine	250	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	31218-83-4	Propetamphos	500	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	299-84-3	Ronnel	175	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	122-34-9	Simazine	250	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	3689-24-5	Sulfotep	150	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	5902-51-2	Terbacil	750	ug/kg	UJ
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	250	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	43121-43-3	Triademefon	650	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	2303-17-5	Triallate	650	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	1582-09-8	Trifluralin	375	ug/kg	U
96284845	7/11/1996	Rainbow Trout	WB	Umatilla River	Columbia River	101		6	21		N	4.8	EPA 8085	AED-Pest	1929-77-7	Vernolate	500	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2250	ug/kg	UJ
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	834-12-8	Ametryn	250	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	1912-24-9	Atrazine	250	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	400	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	400	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	1861-40-1	Benefin	375	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	500	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	314-40-9	Bromacil	1000	ug/kg	UJ
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	23184-66-9	Butachlor	875	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	2008-41-5	Butylate	500	ug/kg	UJ
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	2425-06-1	Captafol	750	ug/kg	UJ
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	133-06-2	Captan	500	ug/kg	UJ
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	1000	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	175	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	1000	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	56-72-4	Coumaphos	300	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	375	ug/kg	UJ
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	1134-23-2	Cycloate	500	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	1897-45-6	Daconil	600	ug/kg	UJ
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	1022-22-6	DDMU	125	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	78-48-8	DEF	350	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	2302-16-4	Diallate-I	950	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	333-41-5	Diazinon	200	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	62-73-7	Dichlorvos	200	ug/kg	UJ
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	*90922	dicofol breakdown	600	ug/kg	UJ
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	60-57-1	Dieldrin	100	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	78-34-2	Dioxathion	425	ug/kg	UJ
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	957-51-7	Diphenamid	750	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	330-54-1	Diuron	1500	ug/kg	UJ
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	100	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	100	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	72-20-8	Endrin	100	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	100	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	100	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	2104-64-5	EPN	250	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	759-94-4	Eptam	500	ug/kg	UJ
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	375	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	563-12-2	Ethion	175	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	200	ug/kg	UJ
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	750	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	175	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	1000	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	944-22-9	Fonophos	150	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	961-11-5	Gardona	500	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	732-11-6	Imidan	275	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	121-75-5	Malathion	200	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	1000	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	125	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	175	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	250	ug/kg	UJ
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	113-48-4	MGK-264	1750	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	2212-67-1	Molinate	500	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	15299-99-7	Napropamide	750	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	1000	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	56-38-2	Parathion	200	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	175	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	1114-71-2	Pebulate	500	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	375	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	26399-36-0	Profluralin	600	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	7287-19-6	Prometryne	250	ug/kg	UJ
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	1000	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	600	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	2312-35-8	Propargite	500	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	139-40-2	Propazine	250	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	500	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	299-84-3	Ronnel	175	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	122-34-9	Simazine	250	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	150	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	5902-51-2	Terbacil	750	ug/kg	UJ
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	250	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	43121-43-3	Triademefon	650	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	2303-17-5	Triallate	650	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	375	ug/kg	U
96284846	7/11/1996	Rainbow Trout	WB	Thomas Creek	Umatilla River	101	B	6	20		N	4.5	EPA 8085	AED-Pest	1929-77-7	Vernolate	500	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2500	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	15972-60-8	Alachlor	1000	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	834-12-8	Ametryn	278	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	1610-17-9	Atraton	833	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	1912-24-9	Atrazine	278	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	444	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	444	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	1861-40-1	Benefin	417	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	556	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	314-40-9	Bromacil	1110	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	23184-66-9	Butachlor	972	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	2008-41-5	Butylate	556	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	2425-06-1	Captafol	420	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	133-06-2	Captan	280	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	786-19-6	Carbophenothion	278	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	1110	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	194	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	194	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	280	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	56-72-4	Coumaphos	333	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	21725-46-2	Cyanazine	417	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	1134-23-2	Dacloate	556	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	1897-45-6	Daconil	667	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	70	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	78-48-8	DEF	389	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	2302-16-4	Diallate-I	1060	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	333-41-5	Diazinon	222	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	340	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	62-73-7	Dichlorvos	222	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	60-57-1	Dieldrin	12	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	60-51-5	Dimethoate	222	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	78-34-2	Dioxathion	472	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	957-51-7	Diphenamid	833	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	330-54-1	Diuron	1690	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	2104-64-5	EPN	278	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	759-94-4	Eptam	556	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	55283-68-6	Ethalfthuralin (Sonalan)	417	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	563-12-2	Ethion	194	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	13194-48-4	Ethoprop	222	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	60168-88-9	Fenarimol	833	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	194	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	115-90-2	Fensulfothion	278	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	560	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	944-22-9	Fonophos	167	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	961-11-5	Gardona	556	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	51235-04-2	Hexazinone	417	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	732-11-6	Imidan	306	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	121-75-5	Malathion	222	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	57837-19-1	Metaxyl	1890	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	51218-45-2	Metholachlor	1110	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	72-43-5	Methoxychlor	139	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	21087-64-9	Metribuzin	278	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	7786-34-7	Mevinphos	278	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	113-48-4	MGK-264	1940	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	2212-67-1	Molinate	556	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	15299-99-7	Napropamide	833	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	27314-13-2	Norflurazon	556	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	500	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	1110	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	56-38-2	Parathion	222	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	194	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	1114-71-2	Pebulate	556	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	417	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	297-99-4	Phosphamidan	667	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	26399-36-0	Profluralin	667	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	1610-18-0	Prometon	278	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	7287-19-6	Prometryne	278	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	1110	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	667	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	2312-35-8	Propargite	556	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	139-40-2	Propazine	278	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	31218-83-4	Propetamphos	556	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	299-84-3	Ronnel	194	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	122-34-9	Simazine	278	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	3689-24-5	Sulfotep	167	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	278	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	43121-43-3	Triademefon	722	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	2303-17-5	Triallate	722	ug/kg	UJ
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	1582-09-8	Trifluralin	417	ug/kg	U
96284904	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101		7	9		N	9.7	EPA 8085	AED-Pest	1929-77-7	Vernolate	556	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2300	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	15972-60-8	Alachlor	930	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	834-12-8	Ametryn	260	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	1610-17-9	Atraton	780	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	1912-24-9	Atrazine	260	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	410	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	410	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	1861-40-1	Benefin	390	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	520	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	314-40-9	Bromacil	1000	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	23184-66-9	Butachlor	910	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	2008-41-5	Butylate	520	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	2425-06-1	Captafol	390	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	133-06-2	Captan	260	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	786-19-6	Carbophenothion	260	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	1000	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	180	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	180	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	260	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	56-72-4	Coumaphos	310	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	390	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	1134-23-2	Cycloate	520	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	1897-45-6	Daconil	620	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	65	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	78-48-8	DEF	360	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	2302-16-4	Diallate-I	980	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	333-41-5	Diazinon	210	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	310	ug/kg	UJ

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	62-73-7	Dichlorvos	210	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	60-57-1	Dieldrin	11	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	60-51-5	Dimethoate	210	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	78-34-2	Dioxathion	440	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	957-51-7	Diphenamid	780	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	330-54-1	Diuron	1600	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	11	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	11	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	72-20-8	Endrin	11	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	11	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	11	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	2104-64-5	EPN	260	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	759-94-4	Eptam	520	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	390	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	563-12-2	Ethion	180	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	210	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	780	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	180	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	115-90-2	Fensulfothion	260	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	500	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	944-22-9	Fonophos	160	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	961-11-5	Gardona	520	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	51235-04-2	Hexazinone	390	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	732-11-6	Imidan	280	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	121-75-5	Malathion	210	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	1800	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	1000	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	72-43-5	Hexoxychlor	130	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	260	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	7786-34-7	Mevinphos	260	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	113-48-4	MGK-264	1800	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	2212-67-1	Molinate	520	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	15299-99-7	Napropamide	780	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	27314-13-2	Norflurazon	520	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	470	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	1000	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	56-38-2	Parathion	210	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	180	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	1114-71-2	Pebulate	520	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	390	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	297-99-4	Phosphamidan	620	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	26399-36-0	Profluralin	620	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	1610-18-0	Prometon	260	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	7287-19-6	Prometryne	260	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	1000	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	620	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	2312-35-8	Propargite	520	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	139-40-2	Propazine	260	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	520	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	299-84-3	Ronnel	180	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	122-34-9	Simazine	260	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	160	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	260	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	43121-43-3	Triademefon	670	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	2303-17-5	Triallate	670	ug/kg	UJ
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	390	ug/kg	U
96284905	7/11/1996	Mountain Whitefish	WB	Umatilla River	Columbia River	101	A	7	9		N	11.5	EPA 8085	AED-Pest	1929-77-7	Vernolate	520	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla River	101	B	7	9		N	10.8	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2600	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla River	101	B	7	9		N	10.8	EPA 8085	AED-Pest	15972-60-8	Alachlor	1100	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla River	101	B	7	9		N	10.8	EPA 8085	AED-Pest	834-12-8	Ametryn	300	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla River	101	B	7	9		N	10.8	EPA 8085	AED-Pest	1610-17-9	Atraton	890	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla River	101	B	7	9		N	10.8	EPA 8085	AED-Pest	1912-24-9	Atrazine	300	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla River	101	B	7	9		N	10.8	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	470	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla River	101	B	7	9		N	10.8	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	470	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla River	101	B	7	9		N	10.8	EPA 8085	AED-Pest	1861-40-1	Benefin	440	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla River	101	B	7	9		N	10.8	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	600	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla River	101	B	7	9		N	10.8	EPA 8085	AED-Pest	314-40-9	Bromacil	1200	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla River	101	B	7	9		N	10.8	EPA 8085	AED-Pest	23184-66-9	Butachlor	1000	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla River	101	B	7	9		N	10.8	EPA 8085	AED-Pest	2008-41-5	Butylate	590	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla River	101	B	7	9		N	10.8	EPA 8085	AED-Pest	2425-06-1	Captafol	890	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla River	101	B	7	9		N	10.8	EPA 8085	AED-Pest	133-06-2	Captan	300	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla River	101	B	7	9		N	10.8	EPA 8085	AED-Pest	786-19-6	Carbophenothion	300	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	1200	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	210	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	210	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	300	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	56-72-4	Coumaphos	350	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	21725-46-2	Cyanazine	440	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	1134-23-2	Cycloate	590	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	1897-45-6	Daconil	710	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	75	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	78-48-8	DEF	410	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	2302-16-4	Diallate-I	1100	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	333-41-5	Diazinon	240	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	360	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	62-73-7	Dichlorvos	240	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	60-57-1	Dieldrin	13	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	60-51-5	Dimethoate	240	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	78-34-2	Dioxathion	500	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	957-51-7	Diphenamid	890	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	330-54-1	Diuron	1800	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	959-98-8	Endosulfan I	13	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	13	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	72-20-8	Endrin	13	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	13	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	13	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	2104-64-5	EPN	300	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	759-94-4	Eptam	590	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	440	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	563-12-2	Ethion	210	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	13194-48-4	Ethoprop	240	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	60168-88-9	Fenarimol	890	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	210	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	115-90-2	Fensulfothion	300	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	600	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	944-22-9	Fonophos	180	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	961-11-5	Gardona	590	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	51235-04-2	Hexazinone	440	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	732-11-6	Imidan	320	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	121-75-5	Malathion	240	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	57837-19-1	Metaxyl	2000	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	51218-45-2	Metholachlor	1200	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	72-43-5	Methoxychlor	150	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	21087-64-9	Metribuzin	300	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	7786-34-7	Mevinphos	300	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	113-48-4	MGK-264	2100	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	2212-67-1	Molinate	590	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	15299-99-7	Napropamide	890	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	27314-13-2	Norflurazon	590	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	530	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	1100	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	56-38-2	Parathion	240	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	210	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	1114-71-2	Pebulate	590	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	40487-42-1	Permethalin	440	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	297-99-4	Phosphamidan	710	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	26399-36-0	Profluralin	710	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	1610-18-0	Prometon	300	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	7287-19-6	Prometryne	300	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	1200	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	710	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	2312-35-8	Propargite	590	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	139-40-2	Propazine	300	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	31218-83-4	Propetamphos	590	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	299-84-3	Ronnel	210	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	122-34-9	Simazine	300	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	3689-24-5	Sulfotep	180	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	300	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	43121-43-3	Triademefon	770	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	2303-17-5	Triallate	770	ug/kg	UJ
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	1582-09-8	Trifluralin	440	ug/kg	U
96284906	7/11/1996	Mountain Whitefish	WB	Thomas Creek	Umatilla Rlver	101	B	7	9		N	10.8	EPA 8085	AED-Pest	1929-77-7	Vernolate	590	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2000	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A												

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	834-12-8	Ametryn	230	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	1610-17-9	Atraton	680	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	1912-24-9	Atrazine	230	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	360	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	360	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	1861-40-1	Benefin	340	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	450	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	314-40-9	Bromacil	910	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	23184-66-9	Butachlor	790	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	2008-41-5	Butylate	450	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	2425-06-1	Captafol	340	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	133-06-2	Captan	230	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	786-19-6	Carbophenothion	230	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	910	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	160	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	160	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	230	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	56-72-4	Coumaphos	270	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	21725-46-2	Cyanazine	340	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	1134-23-2	Cycloate	450	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	1897-45-6	Daconil	540	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	55	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	78-48-8	DEF	320	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	2302-16-4	Diallate-I	860	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	333-41-5	Diazinon	180	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	270	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	62-73-7	Dichlorvos	180	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	60-57-1	Dieldrin	10	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	60-51-5	Dimethoate	180	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	78-34-2	Dioxathion	390	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	957-51-7	Diphenamid	680	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	330-54-1	Diuron	1400	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	959-98-8	Endosulfan I	10	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	10	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	72-20-8	Endrin	10	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	10	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	10	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	2104-64-5	EPN	230	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	759-94-4	Eptam	450	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	340	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	563-12-2	Ethion	160	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	13194-48-4	Ethoprop	180	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	60168-88-9	Fenarimol	680	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	160	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	115-90-2	Fensulfothion	230	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	460	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	944-22-9	Fonophos	140	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	961-11-5	Gardona	450	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	51235-04-2	Hexazinone	350	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	732-11-6	Imidan	250	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	121-75-5	Malathion	180	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	1500	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	51218-45-2	Metholachlor	910	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	72-43-5	Methoxychlor	110	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	21087-64-9	Metribuzin	230	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	7786-34-7	Mevinphos	230	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	113-48-4	MGK-264	1600	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	2212-67-1	Molinate	450	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	15299-99-7	Napropamide	680	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	27314-13-2	Norflurazon	450	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	410	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	910	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	56-38-2	Parathion	180	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	160	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	1114-71-2	Pebulate	450	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	340	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	297-99-4	Phosphamidan	540	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	26399-36-0	Profluralin	540	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	1610-18-0	Prometon	230	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	7287-19-6	Prometryne	230	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	910	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	540	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	2312-35-8	Propargite	450	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	139-40-2	Propazine	230	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	31218-83-4	Propetamphos	450	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	299-84-3	Ronnel	160	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	122-34-9	Simazine	230	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	3689-24-5	Sulfotep	140	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	230	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	43121-43-3	Triademefon	590	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	2303-17-5	Triallate	590	ug/kg	UJ
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	1582-09-8	Trifluralin	340	ug/kg	U
96284907	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	6	EPA 8085	AED-Pest	1929-77-7	Vernolate	450	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2200	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	15972-60-8	Alachlor	870	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	834-12-8	Ametryn	240	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	1610-17-9	Atraton	730	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	1912-24-9	Atrazine	240	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	390	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	390	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	1861-40-1	Benefin	360	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	480	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	314-40-9	Bromacil	970	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	23184-66-9	Butachlor	850	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	2008-41-5	Butylate	480	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	2425-06-1	Captafol	370	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	133-06-2	Captan	290	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	786-19-6	Carbophenothion	240	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	970	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	170	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	170	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	290	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	56-72-4	Coumaphos	290	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	21725-46-2	Cyanazine	360	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	1134-23-2	Dacloate	480	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	1897-45-6	Daconil	580	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	60	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	78-48-8	DEF	340	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	2302-16-4	Diallate-I	920	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	333-41-5	Diazinon	190	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	290	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	62-73-7	Dichlorvos	190	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	60-57-1	Dieldrin	10	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	60-51-5	Dimethoate	190	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	78-34-2	Dioxathion	410	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	957-51-7	Diphenamid	730	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	330-54-1	Diuron	1400	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	959-98-8	Endosulfan I	10	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	10	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	72-20-8	Endrin	10	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	10	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	10	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	2104-64-5	EPN	240	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	759-94-4	Eptam	480	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	360	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	563-12-2	Ethion	170	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	13194-48-4	Ethoprop	190	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	60168-88-9	Fenarimol	730	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	170	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	115-90-2	Fensulfothion	240	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	500	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	944-22-9	Fonophos	140	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	961-11-5	Gardona	480	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	51235-04-2	Hexazinone	370	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	732-11-6	Imidan	270	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	121-75-5	Malathion	190	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	1600	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	51218-45-2	Metholachlor	970	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	72-43-5	Methoxychlor	120	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	21087-64-9	Metribuzin	240	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	7786-34-7	Mevinphos	240	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	113-48-4	MGK-264	1700	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	2212-67-1	Molinate	480	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	15299-99-7	Napropamide	730	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	27314-13-2	Norflurazon	480	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	440	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	970	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	56-38-2	Parathion	190	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	170	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	1114-71-2	Pebulate	480	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	360	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	297-99-4	Phosphamidan	580	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	26399-36-0	Profluralin	580	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	1610-18-0	Prometon	240	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	7287-19-6	Prometryne	240	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	970	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	580	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	2312-35-8	Propargite	480	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	139-40-2	Propazine	240	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	31218-83-4	Propetamphos	480	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	299-84-3	Ronnel	170	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	122-34-9	Simazine	240	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	3689-24-5	Sulfotep	140	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	240	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	43121-43-3	Triademefon	630	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	2303-17-5	Triallate	630	ug/kg	UJ
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	1582-09-8	Trifluralin	360	ug/kg	U
96284908	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101	A	8	9		N	5.6	EPA 8085	AED-Pest	1929-77-7	Vernolate	480	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2000	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	15972-60-8	Alachlor	800	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	834-12-8	Ametryn	220	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	1610-17-9	Atraton	670	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	1912-24-9	Atrazine	220	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	360	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	360	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	1861-40-1	Benefin	330	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	440	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	314-40-9	Bromacil	890	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	23184-66-9	Butachlor	780	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	2008-41-5	Butylate	440	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	2425-06-1	Captafol	340	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	133-06-2	Captan	220	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	786-19-6	Carbophenothion	220	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	890	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	160	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	160	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	220	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	56-72-4	Coumaphos	270	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	21725-46-2	Cyanazine	330	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	1134-23-2	Cycloate	440	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	1897-45-6	Daconil	530	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	55	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	78-48-8	DEF	310	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	2302-16-4	Diallate-I	840	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	333-41-5	Diazinon	180	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	270	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	62-73-7	Dichlorvos	180	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	60-57-1	Dieldrin	10	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	60-51-5	Dimethoate	180	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	78-34-2	Dioxathion	380	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	957-51-7	Diphenamid	670	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	330-54-1	Diuron	1300	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	959-98-8	Endosulfan I	10	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	10	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	72-20-8	Endrin	10	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	10	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	10	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	2104-64-5	EPN	220	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	759-94-4	Eptam	440	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	330	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	563-12-2	Ethion	160	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	13194-48-4	Ethoprop	180	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	60168-88-9	Fenarimol	670	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	160	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	115-90-2	Fensulfothion	220	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	450	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	944-22-9	Fonophos	130	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	961-11-5	Gardona	440	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	51235-04-2	Hexazinone	340	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	732-11-6	Imidan	240	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	121-75-5	Malathion	180	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	1500	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	51218-45-2	Metholachlor	890	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	72-43-5	Methoxychlor	110	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	21087-64-9	Metribuzin	220	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	7786-34-7	Mevinphos	220	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	113-48-4	MGK-264	1600	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	2212-67-1	Molinate	440	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	15299-99-7	Napropamide	670	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	27314-13-2	Norflurazon	440	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	400	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	890	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	56-38-2	Parathion	180	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	160	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	1114-71-2	Pebulate	440	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	330	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	297-99-4	Phosphamidan	530	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	26399-36-0	Profluralin	530	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	1610-18-0	Prometon	220	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	7287-19-6	Prometryne	220	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	890	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	530	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	2312-35-8	Propargite	440	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	139-40-2	Propazine	220	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	31218-83-4	Propetamphos	440	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	299-84-3	Ronnel	160	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	122-34-9	Simazine	220	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	3689-24-5	Sulfotep	130	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	220	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	43121-43-3	Triademefon	580	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	2303-17-5	Triallate	580	ug/kg	UJ
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	1582-09-8	Trifluralin	330	ug/kg	U
96284909	7/11/1996	Mountain Whitefish	FS	Umatilla River	Columbia River	101		8	9		N	6.2	EPA 8085	AED-Pest	1929-77-7	Vernolate	440	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2280	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	15972-60-8	Alachlor	914	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	834-12-8	Ametryn	254	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	1610-17-9	Atraton	761	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	1912-24-9	Atrazine	254	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	406	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	406	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	1861-40-1	Benefin	381	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	508	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	314-40-9	Bromacil	1020	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	23184-66-9	Butachlor	888	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	2008-41-5	Butylate	508	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	2425-06-1	Captafol	370	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	133-06-2	Captan	260	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	786-19-6	Carbophenothion	254	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	1020	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	178	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	178	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	260	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	56-72-4	Coumaphos	304	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	21725-46-2	Cyanazine	381	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	1134-23-2	Cycloate	508	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	1897-45-6	Daconil	609	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	65	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	78-48-8	DEF	355	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	2302-16-4	Diallate-I	964	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	333-41-5	Diazinon	203	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	310	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	62-73-7	Dichlorvos	203	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	60-57-1	Dieldrin	11	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	60-51-5	Dimethoate	203	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	78-34-2	Dioxathion	431	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	957-51-7	Diphenamid	761	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	330-54-1	Diuron	1520	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	959-98-8	Endosulfan I	11	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	11	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	72-20-8	Endrin	11	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	11	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	11	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	2104-64-5	EPN	254	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	759-94-4	Eptam	508	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	381	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	563-12-2	Ethion	178	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	13194-48-4	Ethoprop	203	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	60168-88-9	Fenarimol	761	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	178	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	115-90-2	Fensulfothion	254	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	510	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	944-22-9	Fonophos	152	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	961-11-5	Gardona	508	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	51235-04-2	Hexazinone	381	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	732-11-6	Imidan	279	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	121-75-5	Malathion	203	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	1720	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	51218-45-2	Metholachlor	1020	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	72-43-5	Methoxychlor	127	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	21087-64-9	Metribuzin	254	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	7786-34-7	Mevinphos	254	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	113-48-4	MGK-264	1780	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	2212-67-1	Molinate	508	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	15299-99-7	Napropamide	761	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	27314-13-2	Norflurazon	508	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	457	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	1020	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	56-38-2	Parathion	203	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	178	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	1114-71-2	Pebulate	508	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	381	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	297-99-4	Phosphamidan	609	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	26399-36-0	Profluralin	609	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	1610-18-0	Prometon	254	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	7287-19-6	Prometryne	254	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	1020	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	609	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	2312-35-8	Propargite	508	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	139-40-2	Propazine	254	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	31218-83-4	Propetamphos	508	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	299-84-3	Ronnel	178	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	122-34-9	Simazine	254	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	3689-24-5	Sulfotep	152	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	254	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	43121-43-3	Triademefon	660	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	2303-17-5	Triallate	660	ug/kg	UJ
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	1582-09-8	Trifluralin	381	ug/kg	U
96284990	7/13/1996	Rainbow Trout	WB	Meacham Creek	Umatilla River	101	C	9	30		N	2.8	EPA 8085	AED-Pest	1929-77-7	Vernolate	508	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2200	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	15972-60-8	Alachlor	900	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	834-12-8	Ametryn	250	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	1610-17-9	Atraton	750	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	1912-24-9	Atrazine	250	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	400	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	400	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	1861-40-1	Benefin	370	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	500	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	314-40-9	Bromacil	1000	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	23184-66-9	Butachlor	870	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	2008-41-5	Butylate	500	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	2425-06-1	Captafol	380	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	133-06-2	Captan	250	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	786-19-6	Carbophenothion	250	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	1000	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	170	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	170	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	56-72-4	Coumaphos	300	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	21725-46-2	Cyanazine	370	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7										

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	1897-45-6	Daconil	600	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	60	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	78-48-8	DEF	350	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	2302-16-4	Diallate-I	940	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	333-41-5	Diazinon	200	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	300	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	62-73-7	Dichlorvos	200	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	60-57-1	Dieldrin	20	ug/kg	
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	60-51-5	Dimethoate	200	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	78-34-2	Dioxathion	420	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	957-51-7	Diphenamid	750	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	330-54-1	Diuron	1500	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	959-98-8	Endosulfan I	10	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	10	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	72-20-8	Endrin	10	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	10	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	10	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	2104-64-5	EPN	250	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	759-94-4	Eptam	500	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	370	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	563-12-2	Ethion	170	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	13194-48-4	Ethoprop	200	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	60168-88-9	Fenarimol	750	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	170	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	115-90-2	Fensulfothion	250	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	500	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	944-22-9	Fonophos	150	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	961-11-5	Gardona	500	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	51235-04-2	Hexazinone	370	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	732-11-6	Imidan	270	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	121-75-5	Malathion	200	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	1700	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	51218-45-2	Metholachlor	1000	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	72-43-5	Methoxychlor	120	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	21087-64-9	Metribuzin	250	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	7786-34-7	Mevinphos	250	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	113-48-4	MGK-264	1700	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	2212-67-1	Molinate	500	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	15299-99-7	Napropamide	750	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	27314-13-2	Norflurazon	500	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	450	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	1000	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	56-38-2	Parathion	200	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	170	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	1114-71-2	Pebulate	500	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	370	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	297-99-4	Phosphamidan	600	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	26399-36-0	Profluralin	600	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	1610-18-0	Prometon	250	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	7287-19-6	Prometryne	250	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	1000	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	600	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	2312-35-8	Propargite	14	ug/kg	NJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	139-40-2	Propazine	250	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	31218-83-4	Propetamphos	500	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	299-84-3	Ronnel	170	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	122-34-9	Simazine	250	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	3689-24-5	Sulfotep	150	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	250	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	43121-43-3	Triademefon	650	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	2303-17-5	Triallate	650	ug/kg	UJ
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	1582-09-8	Trifluralin	370	ug/kg	U
96294091	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	5.2	EPA 8085	AED-Pest	1929-77-7	Unolinate	500	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2300	ug/kg	UJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	15972-60-8	Alachlor	920	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	834-12-8	Ametryn	250	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	1610-17-9	Atraton	760	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	1912-24-9	Atrazine	250	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	410	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	410	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	1861-40-1	Benefin	380	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	510	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	314-40-9	Bromacil	1000	ug/kg	UJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	23184-66-9	Butachlor	890	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	2008-41-5	Butylate	510	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	2425-06-1	Captafol	380	ug/kg	UJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	133-06-2	Captan	260	ug/kg	UJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	786-19-6	Carbophenothion	250	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	1000	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	180	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	180	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	260	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	56-72-4	Coumaphos	300	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	380	ug/kg	UJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	1134-23-2	Dacloate	510	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	1897-45-6	Daconil	610	ug/kg	UJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	65	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	78-48-8	DEF	360	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	2302-16-4	Diallate-I	970	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	333-41-5	Diazinon	200	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	310	ug/kg	UJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	62-73-7	Dichlorvos	200	ug/kg	UJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	60-57-1	Dieldrin	12.7	ug/kg	
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	60-51-5	Dimethoate	200	ug/kg	UJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	78-34-2	Dioxathion	430	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	957-51-7	Diphenamid	760	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	330-54-1	Diuron	1500	ug/kg	UJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	11	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	11	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	72-20-8	Endrin	11	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	11	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	130	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	2104-64-5	EPN	250	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	759-94-4	Eptam	510	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	380	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	563-12-2	Ethion	180	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	200	ug/kg	UJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	760	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	180	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	115-90-2	Fensulfothion	250	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	500	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	944-22-9	Fonophos	150	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	961-11-5	Gardona	510	ug/kg	UJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	51235-04-2	Hexazinone	380	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	732-11-6	Imidan	280	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	121-75-5	Malathion	200	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	1700	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	1000	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	130	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	250	ug/kg	UJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	7786-34-7	Mevinphos	250	ug/kg	UJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	113-48-4	MGK-264	1800	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	2212-67-1	Molinate	510	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	15299-99-7	Napropamide	760	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	27314-13-2	Norflurazon	510	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	460	ug/kg	UJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	1000	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	56-38-2	Parathion	200	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	180	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	1114-71-2	Pebulate	510	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	380	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	297-99-4	Phosphamidan	610	ug/kg	UJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	26399-36-0	Profluralin	610	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	1610-18-0	Prometon	250	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	7287-19-6	Prometryne	250	ug/kg	UJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	1000	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	610	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	2312-35-8	Propargite	14	ug/kg	NJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	139-40-2	Propazine	250	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	510	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	299-84-3	Ronnel	180	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	122-34-9	Simazine	250	ug/kg	UJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	150	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	250	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	43121-43-3	Triademefon	660	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	2303-17-5	Triallate	660	ug/kg	UJ
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	380	ug/kg	U
96294092	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.5	EPA 8085	AED-Pest	1929-77-7	Vernolate	510	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2400	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	15972-60-8	Alachlor	970	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	834-12-8	Ametryn	270	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	1610-17-9	Atraton	810	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	1912-24-9	Atrazine	270	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	430	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	430	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	1861-40-1	Benefin	400	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	540	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	314-40-9	Bromacil	1100	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	23184-66-9	Butachlor	940	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	2008-41-5	Butylate	540	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	2425-06-1	Captafol	410	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	133-06-2	Captan	270	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	786-19-6	Carbophenothion	270	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	1100	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	190	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	190	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	270	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	56-72-4	Coumaphos	320	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	21725-46-2	Cyanazine	400	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	1134-23-2	Cycloate	540	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	1897-45-6	Daconil	650	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	65	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	78-48-8	DEF	380	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	2302-16-4	Diallate-I	1000	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	333-41-5	Diazinon	220	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	330	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	62-73-7	Dichlorvos	220	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	60-57-1	Dieldrin	19.2	ug/kg	
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	60-51-5	Dimethoate	220	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	78-34-2	Dioxathion	460	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	957-51-7	Diphenamid	810	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	330-54-1	Diuron	1600	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	959-98-8	Endosulfan I	11	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	11	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	72-20-8	Endrin	11	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	11	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	130	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	2104-64-5	EPN	270	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	759-94-4	Eptam	540	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	400	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	563-12-2	Ethion	190	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	13194-48-4	Ethoprop	220	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	60168-88-9	Fenarimol	810	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	190	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	115-90-2	Fensulfothion	270	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	550	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	944-22-9	Fonophos	160	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	961-11-5	Gardona	540	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	51235-04-2	Hexazinone	400	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	732-11-6	Imidan	300	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	121-75-5	Malathion	220	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	1800	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	51218-45-2	Metholachlor	1100	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	72-43-5	Methoxychlor	130	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	21087-64-9	Metribuzin	270	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	7786-34-7	Mevinphos	270	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	113-48-4	MGK-264	1900	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	2212-67-1	Molinate	540	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	15299-99-7	Napropamide	810	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	27314-13-2	Norflurazon	540	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	480	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	1100	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	56-38-2	Parathion	220	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	190	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	1114-71-2	Pebulate	540	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	400	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	297-99-4	Phosphamidan	650	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	26399-36-0	Profluralin	650	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	1610-18-0	Prometon	270	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	7287-19-6	Prometryne	270	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	1100	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	650	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	2312-35-8	Propargite	21	ug/kg	NJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	139-40-2	Propazine	270	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	31218-83-4	Propetamphos	540	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	299-84-3	Ronnel	190	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	122-34-9	Simazine	270	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	3689-24-5	Sulfotep	160	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	270	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	43121-43-3	Triademefon	700	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	2303-17-5	Triallate	700	ug/kg	UJ
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	1582-09-8	Trifluralin	400	ug/kg	U
96294093	7/15/1996	Largescale Sucker	WB	Yakima River	Columbia River	48	F	10	7		N	3.9	EPA 8085	AED-Pest	1929-77-7	Vernolate	540	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2500	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	15972-60-8	Alachlor	990	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	834-12-8	Ametryn	280	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	1610-17-9	Atraton	830	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	1912-24-9	Atrazine	280	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	440	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	440	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	1861-40-1	Benefin	410	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	550	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	314-40-9	Bromacil	1100	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	23184-66-9	Butachlor	970	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	2008-41-5	Butylate	550	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	2425-06-1	Captafol	420	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	133-06-2	Captan	280	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	786-19-6	Carbophenothion	280	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	1100	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	4	ug/kg	J
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	190	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	280	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	56-72-4	Coumaphos	330	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	410	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	1134-23-2	Cycloate	550	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	1897-45-6	Daconil	660	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	70	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	78-48-8	DEF	390	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	2302-16-4	Diallate-I	1000	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	333-41-5	Diazinon	220	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	330	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	62-73-7	Dichlorvos	220	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	60-57-1	Dieldrin	16	ug/kg	
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	60-51-5	Dimethoate	220	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	78-34-2	Dioxathion	470	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	957-51-7	Diphenamid	830	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	330-54-1	Diuron	1600	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	140	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	2104-64-5	EPN	280	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	759-94-4	Eptam	550	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	410	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	563-12-2	Ethion	190	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	220	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	830	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	190	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	115-90-2	Fensulfothion	280	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	550	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	944-22-9	Fonophos	160	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	961-11-5	Gardona	550	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	51235-04-2	Hexazinone	410	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	732-11-6	Imidan	300	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	121-75-5	Malathion	220	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	1900	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	1100	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	140	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	280	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	7786-34-7	Mevinphos	280	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	113-48-4	MGK-264	1900	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	2212-67-1	Molinate	550	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	15299-99-7	Napropamide	830	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	27314-13-2	Norflurazon	550	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	500	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	1100	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	56-38-2	Parathion	220	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	190	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	1114-71-2	Pebulate	550	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	8.6	ug/kg	NJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	297-99-4	Phosphamidan	660	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	26399-36-0	Profluralin	660	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	1610-18-0	Prometon	280	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	7287-19-6	Prometryne	280	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	1100	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	660	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	2312-35-8	Propargite	30	ug/kg	J
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	139-40-2	Propazine	280	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	550	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	299-84-3	Ronnel	190	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	122-34-9	Simazine	280	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	160	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	280	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	43121-43-3	Triademefon	720	ug/kg	U
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	2303-17-5	Triallate	720	ug/kg	UJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	12	ug/kg	NJ
96294094	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.5	EPA 8085	AED-Pest	1929-77-7	Vernolate	550	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2400	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	15972-60-8	Alachlor	960	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	834-12-8	Ametryn	270	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	1610-17-9	Atraton	800	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	1912-24-9	Atrazine	270	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	430	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	430	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	1861-40-1	Benefin	400	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	530	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	314-40-9	Bromacil	1100	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	23184-66-9	Butachlor	930	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	2008-41-5	Butylate	530	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	2425-06-1	Captafol	400	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	133-06-2	Captan	220	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	786-19-6	Carbophenothion	270	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	1100	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	18	ug/kg	J
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	190	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	270	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	56-72-4	Coumaphos	320	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	400	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	1134-23-2	Cycloate	530	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	1897-45-6	Daconil	640	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	65	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	78-48-8	DEF	370	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	2302-16-4	Diallate-I	1000	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	333-41-5	Diazinon	190	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	34	ug/kg	NJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	62-73-7	Dichlorvos	210	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	60-57-1	Dieldrin	18	ug/kg	
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	60-51-5	Dimethoate	210	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	78-34-2	Dioxathion	450	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	957-51-7	Diphenamid	800	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	330-54-1	Diuron	1600	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	11	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	11	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	72-20-8	Endrin	11	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	11	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	11	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	2104-64-5	EPN	270	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	759-94-4	Eptam	530	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)			

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	563-12-2	Ethion	190	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	210	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	800	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	190	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	115-90-2	Fensulfothion	270	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	550	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	944-22-9	Fonophos	160	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	961-11-5	Gardona	530	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	51235-04-2	Hexazinone	400	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	732-11-6	Imidan	290	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	121-75-5	Malathion	190	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	1800	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	1100	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	130	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	270	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	7786-34-7	Mevinphos	270	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	113-48-4	MGK-264	1900	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	2212-67-1	Molinate	530	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	15299-99-7	Napropamide	800	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	27314-13-2	Norflurazon	530	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	480	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	1100	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	56-38-2	Parathion	210	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	190	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	1114-71-2	Pebulate	530	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	16.5	ug/kg	NJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	297-99-4	Phosphamidan	640	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	26399-36-0	Profluralin	640	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	1610-18-0	Prometon	270	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	7287-19-6	Prometryne	270	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	1100	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	640	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	2312-35-8	Propargite	42	ug/kg	NJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	139-40-2	Propazine	270	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	530	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	299-84-3	Ronnel	190	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	122-34-9	Simazine	270	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	160	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	270	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	43121-43-3	Triademefon	690	ug/kg	U
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	2303-17-5	Triallate	690	ug/kg	UJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	19	ug/kg	NJ
96294095	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	9.5	EPA 8085	AED-Pest	1929-77-7	Vernolate	530	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	2540	ug/kg	UJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	15972-60-8	Alachlor	1010	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	834-12-8	Ametryn	282	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	1610-17-9	Atraton	846	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	1912-24-9	Atrazine	282	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	2642-71-9	Azinphos-ethyl	451	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	451	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	1861-40-1	Benefin	423	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	564	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	314-40-9	Bromacil	32	ug/kg	NJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	23184-66-9	Butachlor	986	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	2008-41-5	Butylate	564	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	2425-06-1	Captafol	325	ug/kg	UJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	133-06-2	Captan	211	ug/kg	UJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	786-19-6	Carbophenothion	282	ug/kg	UJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	1130	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	2921-88-2	Chlorpyrifos	6.85	ug/kg	J
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	197	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	282	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	56-72-4	Coumaphos	338	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	21725-46-2	Cyanazine	423	ug/kg	UJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	1134-23-2	Cycloate	564	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	1897-45-6	Daconil	676	ug/kg	UJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	71	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	78-48-8	DEF	394	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	2302-16-4	Diallate-I	1070	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	333-41-5	Diazinon	225	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	31	ug/kg	J
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest					

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	60-57-1	Dieldrin	21.9	ug/kg	
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	60-51-5	Dimethoate	225	ug/kg	UJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	78-34-2	Dioxathion	479	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	957-51-7	Diphenamid	846	ug/kg	UJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	330-54-1	Diuron	1690	ug/kg	UJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	959-98-8	Endosulfan I	7.9	ug/kg	J
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	2104-64-5	EPN	282	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	759-94-4	Eptam	564	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	423	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	563-12-2	Ethion	197	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	13194-48-4	Ethoprop	225	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	60168-88-9	Fenarimol	846	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	197	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	115-90-2	Fensulfothion	282	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	565	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	944-22-9	Fonophos	169	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	961-11-5	Gardona	564	ug/kg	UJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	51235-04-2	Hexazinone	317	ug/kg	UJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	732-11-6	Imidan	310	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	121-75-5	Malathion	225	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	1920	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	51218-45-2	Metholachlor	1130	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	72-43-5	Methoxychlor	113	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	21087-64-9	Metribuzin	282	ug/kg	UJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	7786-34-7	Mevinphos	282	ug/kg	UJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	113-48-4	MGK-264	1970	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	2212-67-1	Molinate	564	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	15299-99-7	Napropamide	846	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	27314-13-2	Norflurazon	423	ug/kg	UJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	311-45-5	o,o-Diethyl Phosphoric Acid, o-p-Nit	507	ug/kg	UJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	1130	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	56-38-2	Parathion	225	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	197	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	1114-71-2	Pebulate	564	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	11	ug/kg	J
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	297-99-4	Phosphamidan	676	ug/kg	UJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	26399-36-0	Profluralin	676	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	1610-18-0	Prometon	282	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	7287-19-6	Prometryne	282	ug/kg	UJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	1130	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	676	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	2312-35-8	Propargite	23	ug/kg	J
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	139-40-2	Propazine	282	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	31218-83-4	Propetamphos	564	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	299-84-3	Ronnel	197	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	122-34-9	Simazine	282	ug/kg	UJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	3689-24-5	Sulfotep	169	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	282	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	43121-43-3	Triadefon	733	ug/kg	U
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	2303-17-5	Triallate	733	ug/kg	UJ
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	1582-09-8	Trifluralin	32	ug/kg	J
96294096	7/15/1996	Bridgelip Sucker	WB	Yakima River	Columbia River	48	F	11	7		N	7.1	EPA 8085	AED-Pest	1929-77-7	Vernolate	564	ug/kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	700	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	15972-60-8	Alachlor	420	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	230	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	314-40-9	Bromacil	470	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	23184-66-9	Butachlor	700	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2008-41-5	Butylate	230	ug/Kg	UJ
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2425-06-1	Captafol	280	ug/Kg	UJ
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	133-06-2	Captan	160	ug/Kg	UJ
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	786-19-6	Carbophenothion	120	ug/Kg	UJ
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	470		

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	93	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	230	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	56-72-4	Coumaphos	140	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/Kg	UJ
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1134-23-2	Cycloate	230	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1897456	Daconil			R
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	78-48-8	DEF	160	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2303-16-4	Diallate-II	820	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	333-41-5	Diazinon	93	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	230	ug/Kg	UJ
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	62-73-7	Dichlorvos	93	ug/Kg	UJ
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	60-57-1	Dieldrin	12	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	78-34-2	Dioxathion	200	ug/Kg	UJ
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	957-51-7	Diphenamid	350	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	330-54-1	Diuron	700	ug/Kg	UJ
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/Kg	UJ
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	759-94-4	Eptam	230	ug/Kg	UJ
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	563-12-2	Ethion	82	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	13194-48-4	Ethoprop	93	ug/Kg	UJ
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	60168-88-9	Fenarimol	350	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	82	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	230	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	944-22-9	Fonophos	70	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	961-11-5	Gardona	230	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	115322	Kelthane			R
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	121-75-5	Malathion	93	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	150505	Merphos			R
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	700	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	51218-45-2	Metholachlor	470	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	93	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/Kg	UJ
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	113-48-4	MGK-264	930	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2212-67-1	Molinate	230	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	15299-99-7	Napropamide	350	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	470	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	56-38-2	Parathion	93	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	93	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1114-71-2	Pebulate	230	ug/Kg	UJ
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	26399-36-0	Profluralin	280	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/Kg	UJ
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	470	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	280	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2312-35-8	Propargite	230	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	31218-83-4	Propetamphos	230	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	299-84-3	Ronnel	82	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	3689-24-5	Sulfotep	70	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	5902-51-2	Terbacil	350	ug/Kg	UJ
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	43121-43-3	Triademefon	300	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2303-17-5	Triallate	350	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/Kg	U
96374700	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1929-77-7	Unifluate	230	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	660	ug/Kg	UJ
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	15972-60-8	Alachlor	400	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	834-12-8	Ametryn	110	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1610-17-9	Atraton	160	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1912-24-9	Atrazine	110	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	180	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	180	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1861-40-1	Benefin	160	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	220	ug/Kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	314-40-9	Bromacil	440	ug/Kg	UJ
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	23184-66-9	Butachlor	660	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2008-41-5	Butylate	220	ug/Kg	UJ
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2425-06-1	Captafol	260	ug/Kg	UJ
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	133-06-2	Captan	150	ug/Kg	UJ
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	786-19-6	Carbophenothion	110	ug/Kg	UJ
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	440	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	1.8	ug/Kg	J
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	220	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	56-72-4	Coumaphos	130	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	21725-46-2	Cyanazine	160	ug/Kg	UJ
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1134-23-2	Cycloate	220	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1897456	Daconil			R
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	78-48-8	DEF	150	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2303-16-4	Diallate-II	770	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	333-41-5	Diazinon	88	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	220	ug/Kg	UJ
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	62-73-7	Dichlorvos	88	ug/Kg	UJ
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	60-57-1	Dieldrin	11	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	78-34-2	Dioxathion	190	ug/Kg	UJ
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	957-51-7	Diphenamid	330	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	330-54-1	Diuron	660	ug/Kg	UJ
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	959-98-8	Endosulfan I	11	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	11	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	72-20-8	Endrin	11	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	11	ug/Kg	UJ
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	11	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2104-64-5	EPN	110	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	759-94-4	Eptam	220	ug/Kg	UJ
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	160	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	563-12-2	Ethion	77	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	13194-48-4	Ethoprop	88	ug/Kg	UJ
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	60168-88-9	Fenarimol	330	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	77	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	220	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	944-22-9	Fonophos	66	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	961-11-5	Gardona	220	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	732-11-6	Imidan	120	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	115322	Kelthane			R
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	121-75-5	Malathion	88	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	150505	Merphos			R
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	660	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	51218-45-2	Metholachlor	440	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	72-43-5	Methoxychlor	11	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	88	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	21087-64-9	Metribuzin	110	ug/Kg	UJ
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	113-48-4	MGK-264	880	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2212-67-1	Molinate	220	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	15299-99-7	Napropamide	330	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	440	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	56-38-2	Parathion	88	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	88	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1114-71-2	Pebulate	220	ug/Kg	UJ
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	160	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	26399-36-0	Profluralin	260	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	7287-19-6	Prometryne	110	ug/Kg	UJ
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	440	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	260	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2312-35-8	Propargite	220	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	139-40-2	Propazine	110	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	31218-83-4	Propetamphos	220	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	299-84-3	Ronnel	77	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	122-34-9	Simazine	110	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	3689-24-5	Sulfotep	66	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	5902-51-2	Terbacil	330	ug/Kg	UJ
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	110	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	43121-43-3	Triademefon	290	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2303-17-5	Triallate	330	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1582-09-8	Trifluralin	160	ug/Kg	U
96374701	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1929-77-7	Vernolate	220	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	710	ug/Kg	UJ
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	15972-60-8	Alachlor	430	ug/Kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	314-40-9	Bromacil	470	ug/Kg	UJ
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	23184-66-9	Butachlor	710	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/Kg	UJ
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2425-06-1	Captafol	280	ug/Kg	UJ
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/Kg	UJ
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	786-19-6	Carbophenothion	120	ug/Kg	UJ
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	470	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	95	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	56-72-4	Coumaphos	140	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/Kg	UJ
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1897456	Daconil			R
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2303-16-4	Diallate-II	830	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	333-41-5	Diazinon	95	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/Kg	UJ
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	62-73-7	Dichlorvos	95	ug/Kg	UJ
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	60-57-1	Dieldrin	12	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	78-34-2	Dioxathion	200	ug/Kg	UJ
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	957-51-7	Diphenamid	360	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	330-54-1	Diuron	710	ug/Kg	UJ
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/Kg	UJ
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/Kg	UJ
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	563-12-2	Ethion	83	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	13194-48-4	Ethoprop	95	ug/Kg	UJ
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	60168-88-9	Fenarimol	360	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	83	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	944-22-9	Fonophos	71	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	115322	Kelthane			R
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	121-75-5	Malathion	95	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	150505	Merphos			R
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	710	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	51218-45-2	Metholachlor	470	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	95	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/Kg	UJ
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	113-48-4	MGK-264	950	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	15299-99-7	Napropamide	360	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	470	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	56-38-2	Parathion	95	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	95	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/Kg	UJ
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	26399-36-0	Profluralin	280	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/Kg	UJ
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	470	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	280	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	299-84-3	Ronnel	83	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	3689-24-5	Sulfotep	71	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	5902-51-2	Terbacil	360	ug/Kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	43121-43-3	Triademefon	310	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	2303-17-5	Triallate	360	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/Kg	U
96374702	9/9/1996	Largescale Sucker	FS	Umatilla River	Columbia River	30	A	12	8		N	1.2	EPA 8085	AED-Pest	1929-77-7	Vernolate	240	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	710	ug/Kg	UJ
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	15972-60-8	Alachlor	420	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	314-40-9	Bromacil	470	ug/Kg	UJ
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	23184-66-9	Butachlor	710	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/Kg	UJ
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	2425-06-1	Captafol	280	ug/Kg	UJ
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/Kg	UJ
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	786-19-6	Carbophenothion	120	ug/Kg	UJ
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	470	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	94	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	56-72-4	Coumaphos	140	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/Kg	UJ
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	1897456	Daconil			R
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	2303-16-4	Diallate-II	830	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	333-41-5	Diazinon	94	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/Kg	UJ
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	62-73-7	Dichlorvos	94	ug/Kg	UJ
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	60-57-1	Dieldrin	2.8	ug/Kg	J
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	78-34-2	Dioxathion	200	ug/Kg	UJ
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	957-51-7	Diphenamid	350	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	330-54-1	Diuron	710	ug/Kg	UJ
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/Kg	UJ
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/Kg	UJ
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	563-12-2	Ethion	83	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	13194-48-4	Ethoprop	94	ug/Kg	UJ
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	60168-88-9	Fenarimol	350	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	83	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	944-22-9	Fonophos	71	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	115322	Kelthane			R
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	121-75-5	Malathion	94	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	150505	Merphos			R
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	710	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	51218-45-2	Metholachlor	470	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	94	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/Kg	UJ
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	113-48-4	MGK-264	940	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	15299-99-7	Napropamide	350	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	470	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	56-38-2	Parathion	94	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	94	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/Kg	UJ
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	26399-36-0	Profluralin	280	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/Kg	UJ
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	470	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	280	ug/Kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	299-84-3	Ronnel	83	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	3689-24-5	Sulfotep	71	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	5902-51-2	Terbacil	350	ug/Kg	UJ
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	43121-43-3	Triademefon	310	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	2303-17-5	Triallate	350	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/Kg	U
96374730	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.4	EPA 8085	AED-Pest	1929-77-7	Vernolate	240	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	730	ug/Kg	UJ
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	15972-60-8	Alachlor	440	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	314-40-9	Bromacil	490	ug/Kg	UJ
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	23184-66-9	Butachlor	730	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/Kg	UJ
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	2425-06-1	Captafol	290	ug/Kg	UJ
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/Kg	UJ
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	786-19-6	Carbophenothion	120	ug/Kg	UJ
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	490	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	97	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/Kg	UJ
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	1897456	Daconil			R
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	2303-16-4	Diallate-II	850	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	333-41-5	Diazinon	97	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/Kg	UJ
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	62-73-7	Dichlorvos	97	ug/Kg	UJ
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	60-57-1	Dieldrin	5.1	ug/Kg	J
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/Kg	UJ
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	957-51-7	Diphenamid	360	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	330-54-1	Diuron	730	ug/Kg	UJ
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/Kg	UJ
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/Kg	UJ
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	563-12-2	Ethion	85	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	13194-48-4	Ethoprop	97	ug/Kg	UJ
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	60168-88-9	Fenarimol	360	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	85	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	944-22-9	Fonophos	73	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	115322	Kelthane			R
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	121-75-5	Malathion	97	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	150505	Merphos			R
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	730	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	51218-45-2	Metholachlor	490	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	97	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/Kg	UJ
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	113-48-4	MGK-264	970	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	15299-99-7	Napropamide	360	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	490	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	56-38-2	Parathion	97	ug/Kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	97	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/Kg	UJ
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	26399-36-0	Profluralin	290	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/Kg	UJ
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	490	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	290	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	299-84-3	Ronnel	85	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	3689-24-5	Sulfotep	73	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	5902-51-2	Terbacil	360	ug/Kg	UJ
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	2303-17-5	Triallate	360	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/Kg	U
96374731	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.2	EPA 8085	AED-Pest	1929-77-7	Vernolate	240	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	720	ug/Kg	UJ
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	15972-60-8	Alachlor	430	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	314-40-9	Bromacil	480	ug/Kg	UJ
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	23184-66-9	Butachlor	720	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/Kg	UJ
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	2425-06-1	Captafol	290	ug/Kg	UJ
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/Kg	UJ
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	786-19-6	Carbophenothion	120	ug/Kg	UJ
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	480	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	96	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	56-72-4	Coumaphos	140	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/Kg	UJ
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	1897456	Daconil			R
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	2303-16-4	Diallate-II	840	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	333-41-5	Diazinon	96	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/Kg	UJ
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	62-73-7	Dichlorvos	96	ug/Kg	UJ
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	60-57-1	Dieldrin	3.8	ug/Kg	J
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	78-34-2	Dioxathion	200	ug/Kg	UJ
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	957-51-7	Diphenamid	360	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	330-54-1	Diuron	720	ug/Kg	UJ
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/Kg	UJ
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/Kg	UJ
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	563-12-2	Ethion	84	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	13194-48-4	Ethoprop	96	ug/Kg	UJ
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	60168-88-9	Fenarimol	360	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	84	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	51630-58-1	Fenvaleate (total)	240	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	944-22-9	Fonophos	72	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	115322	Kelthane			R
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	121-75-5	Malathion	96	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	150505	Merphos			R
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	720	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	51218-45-2	Metholachlor	480	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/Kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	96	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/Kg	UJ
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	113-48-4	MGK-264	960	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	15299-99-7	Napropamide	360	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	480	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	56-38-2	Parathion	96	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	96	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/Kg	UJ
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	26399-36-0	Profluralin	290	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/Kg	UJ
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	480	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	290	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	299-84-3	Ronnel	84	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	3689-24-5	Sulfotep	72	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	5902-51-2	Terbacil	360	ug/Kg	UJ
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	43121-43-3	Triadefon	310	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	2303-17-5	Triallate	360	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/Kg	U
96374732	9/11/1996	Rainbow Trout	FS	Yakima River	Columbia River	49		13	7		N	3.7	EPA 8085	AED-Pest	1929-77-7	Vernolate	240	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	810	ug/Kg	UJ
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	15972-60-8	Alachlor	490	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	834-12-8	Ametryn	140	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	1610-17-9	Atraton	200	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	1912-24-9	Atrazine	140	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	220	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	220	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	1861-40-1	Benefin	200	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	270	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	314-40-9	Bromacil	540	ug/Kg	UJ
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	23184-66-9	Butachlor	810	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	2008-41-5	Butylate	270	ug/Kg	UJ
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	2425-06-1	Captafol	330	ug/Kg	UJ
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	133-06-2	Captan	190	ug/Kg	UJ
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	786-19-6	Carbophenothion	140	ug/Kg	UJ
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	540	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	110	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	270	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	56-72-4	Coumaphos	160	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	21725-46-2	Cyanazine	200	ug/Kg	UJ
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	1134-23-2	Cycloate	270	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	1897456	Deconil			R
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	78-48-8	DEF	190	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	2303-16-4	Diallate-II	950	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	333-41-5	Diazinon	110	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	270	ug/Kg	UJ
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	62-73-7	Dichlorvos	110	ug/Kg	UJ
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	60-57-1	Dieldrin	7.3	ug/Kg	J
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	78-34-2	Dioxathion	230	ug/Kg	UJ
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	957-51-7	Diphenamid	410	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	330-54-1	Diuron	810	ug/Kg	UJ
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	959-98-8	Endosulfan I	14	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	14	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	72-20-8	Endrin	14	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	14	ug/Kg	UJ
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	14	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	2104-64-5	EPN	140	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	759-94-4	Eptam	270	ug/Kg	UJ
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	200	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	563-12-2	Ethion	95	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	13194-48-4	Ethoprop	110	ug/Kg	UJ
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	60168-88-9	Fenarimol	410	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	95	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	270	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	944-22-9	Fonophos	81	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	961-11-5	Gardona	270	ug/Kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	732-11-6	Imidan	150	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	115322	Kelthane			R
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	121-75-5	Malathion	110	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	150505	Merphos			R
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	810	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	51218-45-2	Metholachlor	540	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	72-43-5	Methoxychlor	14	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	110	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	21087-64-9	Metribuzin	140	ug/Kg	UJ
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	113-48-4	MGK-264	1100	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	2212-67-1	Molinate	270	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	15299-99-7	Napropamide	410	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	540	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	56-38-2	Parathion	110	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	110	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	1114-71-2	Pebulate	270	ug/Kg	UJ
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	200	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	26399-36-0	Profluralin	330	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	7287-19-6	Prometryne	140	ug/Kg	UJ
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	540	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	330	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	2312-35-8	Propargite	270	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	139-40-2	Propazine	140	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	31218-83-4	Propetamphos	270	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	299-84-3	Ronnel	95	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	122-34-9	Simazine	140	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	3689-24-5	Sulfotep	81	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	5902-51-2	Terbacil	410	ug/Kg	UJ
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	140	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	43121-43-3	Triademefon	350	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	2303-17-5	Triallate	410	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	1582-09-8	Trifluralin	200	ug/Kg	U
96374765	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	6.8	EPA 8085	AED-Pest	1929-77-7	Trifluralin	270	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	710	ug/Kg	UJ
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	15972-60-8	Alachlor	420	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	314-40-9	Bromacil	470	ug/Kg	UJ
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	23184-66-9	Butachlor	710	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/Kg	UJ
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	2425-06-1	Captafol	280	ug/Kg	UJ
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/Kg	UJ
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	786-19-6	Carbophenothion	120	ug/Kg	UJ
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	470	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	94	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	56-72-4	Coumaphos	140	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/Kg	UJ
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1897456	Daconil			R
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	2303-16-4	Diallate-II	830	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	333-41-5	Diazinon	94	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/Kg	UJ
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	62-73-7	Dichlorvos	94	ug/Kg	UJ
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	60-57-1	Dieldrin	6.4	ug/Kg	NJ
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	78-34-2	Dioxathion	200	ug/Kg	UJ
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	957-51-7	Diphenamid	350	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	330-54-1	Diuron	710	ug/Kg	UJ
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/Kg	UJ
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/Kg	UJ
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/Kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	563-12-2	Ethion	83	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	13194-48-4	Ethoprop	94	ug/Kg	UJ
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	60168-88-9	Fenarimol	350	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	83	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	944-22-9	Fonophos	71	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	115322	Kelthane			R
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	121-75-5	Malathion	94	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	150505	Merphos			R
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	710	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	51218-45-2	Metholachlor	470	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	94	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/Kg	UJ
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	113-48-4	MGK-264	940	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	15299-99-7	Napropamide	350	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	470	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	56-38-2	Parathion	94	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	94	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/Kg	UJ
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	26399-36-0	Profluralin	280	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/Kg	UJ
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	470	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	280	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	299-84-3	Ronnel	83	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	3689-24-5	Sulfotep	71	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	5902-51-2	Terbacil	350	ug/Kg	UJ
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	43121-43-3	Triademeefon	310	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	2303-17-5	Triallate	350	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/Kg	U
96374766	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1929-77-7	Vernolate	240	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	770	ug/Kg	UJ
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	15972-60-8	Alachlor	460	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	834-12-8	Ametryn	130	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1912-24-9	Atrazine	130	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	210	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	210	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	260	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	314-40-9	Bromacil	520	ug/Kg	UJ
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	23184-66-9	Butachlor	770	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	2008-41-5	Butylate	260	ug/Kg	UJ
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	2425-06-1	Captafol	310	ug/Kg	UJ
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	133-06-2	Captan	180	ug/Kg	UJ
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	786-19-6	Carbophenothion	130	ug/Kg	UJ
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	520	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	100	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	260	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/Kg	UJ
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1134-23-2	Cycloate	260	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1897456	Daconil			R
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	78-48-8	DEF	180	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	2303-16-4	Diallate-II	900	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	333-41-5	Diazinon	100	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	260	ug/Kg	UJ
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	62-73-7	Dichlorvos	100	ug/Kg	UJ
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	60-57-1	Dieldrin	8	ug/Kg	J
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	78-34-2	Dioxathion	220	ug/Kg	UJ
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	957-51-7	Diphenamid	390	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	330-54-1	Diuron	770	ug/Kg	UJ
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	959-98-8	Endosulfan I	13	ug/Kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	13	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	72-20-8	Endrin	13	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	13	ug/Kg	UJ
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	13	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	2104-64-5	EPN	130	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	759-94-4	Eptam	260	ug/Kg	UJ
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	190	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	563-12-2	Ethion	90	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	13194-48-4	Ethoprop	100	ug/Kg	UJ
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	60168-88-9	Fenarimol	390	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	90	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	260	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	944-22-9	Fonophos	77	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	961-11-5	Gardona	260	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	115322	Kelthane			R
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	121-75-5	Malathion	100	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	150505	Merphos			R
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	770	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	51218-45-2	Metholachlor	520	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	72-43-5	Methoxychlor	13	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	100	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	21087-64-9	Metribuzin	130	ug/Kg	UJ
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	113-48-4	MGK-264	1000	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	2212-67-1	Molinate	260	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	15299-99-7	Napropamide	390	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	520	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	56-38-2	Parathion	100	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	100	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1114-71-2	Pebulate	260	ug/Kg	UJ
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	26399-36-0	Profluralin	310	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	7287-19-6	Prometryne	130	ug/Kg	UJ
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	520	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	310	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	2312-35-8	Propargite	260	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	139-40-2	Propazine	130	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	31218-83-4	Propetamphos	260	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	299-84-3	Ronnel	90	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	122-34-9	Simazine	130	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	3689-24-5	Sulfotep	77	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	5902-51-2	Terbacil	390	ug/Kg	UJ
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	130	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	43121-43-3	Triademefon	340	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	2303-17-5	Triallate	390	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/Kg	U
96374767	9/12/1996	Rainbow Trout	WB	Yakima River	Columbia River	49		14	7		N	5.8	EPA 8085	AED-Pest	1929-77-7	Vernolate	260	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	760	ug/Kg	UJ
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	15972-60-8	Alachlor	450	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	834-12-8	Ametryn	130	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	1912-24-9	Atrazine	130	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	250	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	314-40-9	Bromacil	500	ug/Kg	UJ
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	23184-66-9	Butachlor	760	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	2008-41-5	Butylate	250	ug/Kg	UJ
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	2425-06-1	Captafol	300	ug/Kg	UJ
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	133-06-2	Captan	180	ug/Kg	UJ
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	786-19-6	Carbophenothion	130	ug/Kg	UJ
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	500	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	100	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/Kg	UJ
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	1134-23-2	Cycloate	250	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	1897456	Daconil			R
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	78-48-8	DEF	180	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	2303-16-4	Diallate-II	880	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	333-41-5	Diazinon	100	ug/Kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	250	ug/Kg	UJ
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	62-73-7	Dichlorvos	100	ug/Kg	UJ
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	60-57-1	Dieldrin	6.1	ug/Kg	NJ
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/Kg	UJ
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	957-51-7	Diphenamid	380	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	330-54-1	Diuron	760	ug/Kg	UJ
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	959-98-8	Endosulfan I	13	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	13	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	72-20-8	Endrin	13	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	13	ug/Kg	UJ
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	13	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	2104-64-5	EPN	130	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	759-94-4	Eptam	250	ug/Kg	UJ
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	190	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	563-12-2	Ethion	88	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	13194-48-4	Ethoprop	100	ug/Kg	UJ
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	60168-88-9	Fenarimol	380	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	88	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	250	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	944-22-9	Fonophos	76	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	961-11-5	Gardona	250	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	115322	Kelthane			R
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	121-75-5	Malathion	100	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	150505	Merphos			R
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	760	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	51218-45-2	Metholachlor	500	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	72-43-5	Methoxychlor	13	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	100	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	21087-64-9	Metribuzin	130	ug/Kg	UJ
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	113-48-4	MGK-264	1000	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	2212-67-1	Molinate	250	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	15299-99-7	Napropamide	380	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	500	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	56-38-2	Parathion	100	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	100	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	1114-71-2	Pebulate	250	ug/Kg	UJ
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	26399-36-0	Profluralin	300	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	7287-19-6	Prometryne	130	ug/Kg	UJ
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	500	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	300	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	2312-35-8	Propargite	250	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	139-40-2	Propazine	130	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	31218-83-4	Propetamphos	250	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	299-84-3	Ronnel	88	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	122-34-9	Simazine	130	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	3689-24-5	Sulfotep	76	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	5902-51-2	Terbacil	380	ug/Kg	UJ
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	130	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	43121-43-3	Triademefon	330	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	2303-17-5	Triallate	380	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/Kg	U
96374793	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	4.7	EPA 8085	AED-Pest	1929-77-7	Vernolate	250	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	730	ug/Kg	UJ
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	15972-60-8	Alachlor	440	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	314-40-9	Bromacil	490	ug/Kg	UJ
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	23184-66-9	Butachlor	730	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/Kg	UJ
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	2425-06-1	Captafol	290	ug/Kg	UJ
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/Kg	UJ
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	786-19-6	Carbophenothion	120	ug/Kg	UJ
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	490	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	98	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/Kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/Kg	UJ
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	1897456	Daconil			R
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	2303-16-4	Diallate-II	850	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	333-41-5	Diazinon	98	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/Kg	UJ
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	62-73-7	Dichlorvos	98	ug/Kg	UJ
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	60-57-1	Dieldrin	8.8	ug/Kg	J
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/Kg	UJ
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	957-51-7	Diphenamid	370	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	330-54-1	Diuron	730	ug/Kg	UJ
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/Kg	UJ
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/Kg	UJ
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	563-12-2	Ethion	85	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	13194-48-4	Ethoprop	98	ug/Kg	UJ
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	60168-88-9	Fenarimol	370	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	85	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	944-22-9	Fonophos	73	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	115322	Kelthane			R
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	121-75-5	Malathion	98	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	150505	Merphos			R
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	730	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	51218-45-2	Metholachlor	490	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	98	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/Kg	UJ
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	113-48-4	MGK-264	980	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	15299-99-7	Napropamide	370	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	490	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	56-38-2	Parathion	98	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	98	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/Kg	UJ
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	26399-36-0	Profluralin	290	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/Kg	UJ
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	23950-58-5	Promamide (kerb)	490	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	290	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	299-84-3	Ronnel	85	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	3689-24-5	Sulfotep	73	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	5902-51-2	Terbacil	370	ug/Kg	UJ
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	2303-17-5	Triallate	370	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/Kg	U
96374794	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	8	EPA 8085	AED-Pest	1929-77-7	Vernolate	240	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	730	ug/Kg	UJ
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	15972-60-8	Alachlor	440	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	314-40-9	Bromacil	490	ug/Kg	UJ
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	23184-66-9	Butachlor	730	ug/Kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/Kg	UJ
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	2425-06-1	Captafol	290	ug/Kg	UJ
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/Kg	UJ
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	786-19-6	Carbophenothion	120	ug/Kg	UJ
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	490	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	97	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/Kg	UJ
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	1897456	Daconil			R
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	2303-16-4	Diallate-II	850	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	333-41-5	Diazinon	97	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/Kg	UJ
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	62-73-7	Dichlorvos	97	ug/Kg	UJ
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	60-57-1	Dieldrin	7.8	ug/Kg	J
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/Kg	UJ
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	957-51-7	Diphenamid	360	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	330-54-1	Diuron	730	ug/Kg	UJ
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/Kg	UJ
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/Kg	UJ
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	563-12-2	Ethion	85	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	13194-48-4	Ethoprop	97	ug/Kg	UJ
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	60168-88-9	Fenarimol	360	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	85	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	944-22-9	Fonophos	73	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	115322	Kelthane			R
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	121-75-5	Malathion	97	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	150505	Merphos			R
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	730	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	51218-45-2	Metholachlor	490	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	97	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/Kg	UJ
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	113-48-4	MGK-264	970	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	15299-99-7	Napropamide	360	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	490	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	56-38-2	Parathion	97	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	97	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/Kg	UJ
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	26399-36-0	Profluralin	290	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/Kg	UJ
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	490	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	290	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	299-84-3	Ronnel	85	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	3689-24-5	Sulfotep	73	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	5902-51-2	Terbacil	360	ug/Kg	UJ
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	2303-17-5	Triallate	360	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/Kg	U
96374795	9/12/1996	Largescale Sucker	WB	Yakima River	Columbia River	49		15	5		N	6.3	EPA 8085	AED-Pest	1929-77-7	Trifluralin	240	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	740	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	15972-60-8	Alachlor	440	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/Kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	250	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	314-40-9	Bromacil	490	ug/Kg	UJ
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	23184-66-9	Butachlor	740	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	2008-41-5	Butylate	250	ug/Kg	UJ
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	2425-06-1	Captafol	300	ug/Kg	UJ
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/Kg	UJ
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	786-19-6	Carbophenothion	120	ug/Kg	UJ
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	490	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	10	ug/Kg	J
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/Kg	UJ
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	1134-23-2	Cycloate	250	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	1897456	Daconil			R
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	2303-16-4	Diallate-II	860	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	333-41-5	Diazinon	99	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	250	ug/Kg	UJ
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	62-73-7	Dichlorvos	99	ug/Kg	UJ
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	60-57-1	Dieldrin	25	ug/Kg	
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/Kg	UJ
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	957-51-7	Diphenamid	370	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	330-54-1	Diuron	740	ug/Kg	UJ
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	6.2	ug/Kg	J
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/Kg	UJ
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	759-94-4	Eptam	250	ug/Kg	UJ
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	190	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	563-12-2	Ethion	86	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	99	ug/Kg	UJ
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	370	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	86	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	250	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	944-22-9	Fonophos	74	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	961-11-5	Gardona	250	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	115322	Kelthane			R
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	121-75-5	Malathion	99	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	150505	Merphos			R
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	740	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	490	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	99	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/Kg	UJ
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	113-48-4	MGK-264	990	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	2212-67-1	Molinate	250	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	15299-99-7	Napropamide	370	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	490	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	56-38-2	Parathion	99	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	99	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	1114-71-2	Pebulate	250	ug/Kg	UJ
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	26399-36-0	Profluralin	300	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/Kg	UJ
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	490	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	300	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	2312-35-8	Propargite	32	ug/Kg	J
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	250	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	299-84-3	Ronnel	86	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	74	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	5902-51-2	Terbacil	370	ug/Kg	UJ
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/Kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	2303-17-5	Triallate	370	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/Kg	U
96374796	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.5	EPA 8085	AED-Pest	1929-77-7	Vernolate	250	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	670	ug/Kg	UJ
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	15972-60-8	Alachlor	400	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	834-12-8	Ametryn	110	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	1610-17-9	Atraton	170	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	1912-24-9	Atrazine	110	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	180	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	180	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	1861-40-1	Benefin	170	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	220	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	314-40-9	Bromacil	450	ug/Kg	UJ
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	23184-66-9	Butachlor	670	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	2008-41-5	Butylate	220	ug/Kg	UJ
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	2425-06-1	Captafol	270	ug/Kg	UJ
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	133-06-2	Captan	160	ug/Kg	UJ
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	786-19-6	Carbophenothion	110	ug/Kg	UJ
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	450	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	89	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	220	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	56-72-4	Coumaphos	130	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	21725-46-2	Cyanazine	170	ug/Kg	UJ
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	1134-23-2	Cycloate	220	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	1897456	Daconil			R
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	78-48-8	DEF	160	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	2303-16-4	Diallate-II	780	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	333-41-5	Diazinon	89	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	220	ug/Kg	UJ
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	62-73-7	Dichlorvos	89	ug/Kg	UJ
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	60-57-1	Dieldrin	2.9	ug/Kg	J
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	78-34-2	Dioxathion	190	ug/Kg	UJ
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	957-51-7	Diphenamid	330	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	330-54-1	Diuron	670	ug/Kg	UJ
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	959-98-8	Endosulfan I	11	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	11	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	72-20-8	Endrin	11	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	11	ug/Kg	UJ
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	11	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	2104-64-5	EPN	110	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	759-94-4	Eptam	220	ug/Kg	UJ
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	170	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	563-12-2	Ethion	78	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	13194-48-4	Ethoprop	89	ug/Kg	UJ
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	60168-88-9	Fenarimol	330	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	78	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	220	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	944-22-9	Fonophos	67	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	961-11-5	Gardona	220	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	732-11-6	Imidan	120	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	115322	Kelthane			R
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	121-75-5	Malathion	89	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	150505	Merphos			R
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	670	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	51218-45-2	Metholachlor	450	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	72-43-5	Methoxychlor	11	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	89	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	21087-64-9	Metribuzin	110	ug/Kg	UJ
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	113-48-4	MGK-264	890	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	2212-67-1	Molinate	220	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	15299-99-7	Napropamide	330	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	450	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	56-38-2	Parathion	89	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	89	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	1114-71-2	Pebulate	220	ug/Kg	UJ
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	170	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	26399-36-0	Profluralin	270	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	7287-19-6	Prometryne	110	ug/Kg	UJ
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	450	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	270	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	2312-35-8	Propargite	220	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	139-40-2	Propazine	110	ug/Kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	31218-83-4	Propetamphos	220	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	299-84-3	Ronnel	78	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	122-34-9	Simazine	110	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	3689-24-5	Sulfotep	67	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	5902-51-2	Terbacil	330	ug/Kg	UJ
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	110	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	43121-43-3	Triademefon	290	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	2303-17-5	Triallate	330	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	1582-09-8	Trifluralin	170	ug/Kg	U
96374797	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	3	EPA 8085	AED-Pest	1929-77-7	Vernolate	220	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	790	ug/Kg	UJ
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	15972-60-8	Alachlor	470	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	834-12-8	Ametryn	130	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	1610-17-9	Atraton	200	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	1912-24-9	Atrazine	130	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	210	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	210	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	1861-40-1	Benefin	200	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	260	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	314-40-9	Bromacil	530	ug/Kg	UJ
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	23184-66-9	Butachlor	790	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	2008-41-5	Butylate	260	ug/Kg	UJ
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	2425-06-1	Captafol	320	ug/Kg	UJ
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	133-06-2	Captan	180	ug/Kg	UJ
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	786-19-6	Carbophenothion	130	ug/Kg	UJ
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	530	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	110	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	260	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	56-72-4	Coumaphos	160	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	21725-46-2	Cyanazine	200	ug/Kg	UJ
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	1134-23-2	Cycloate	260	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	1897456	Daconil			R
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	78-48-8	DEF	180	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	2303-16-4	Diallate-II	920	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	333-41-5	Diazinon	110	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	260	ug/Kg	UJ
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	62-73-7	Dichlorvos	110	ug/Kg	UJ
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	60-57-1	Dieldrin	3.7	ug/Kg	J
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	78-34-2	Dioxathion	220	ug/Kg	UJ
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	957-51-7	Diphenamid	390	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	330-54-1	Diuron	790	ug/Kg	UJ
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	959-98-8	Endosulfan I	13	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	13	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	72-20-8	Endrin	13	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	13	ug/Kg	UJ
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	13	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	2104-64-5	EPN	130	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	759-94-4	Eptam	260	ug/Kg	UJ
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	200	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	563-12-2	Ethion	92	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	13194-48-4	Ethoprop	110	ug/Kg	UJ
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	60168-88-9	Fenarimol	390	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	92	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	260	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	944-22-9	Fonophos	79	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	961-11-5	Gardona	260	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	115322	Kelthane			R
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	121-75-5	Malathion	110	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	150505	Merphos			R
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	790	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	51218-45-2	Metholachlor	530	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	72-43-5	Methoxychlor	13	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	110	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	21087-64-9	Metribuzin	130	ug/Kg	UJ
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	113-48-4	MGK-264	1100	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	2212-67-1	Molinate	260	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	15299-99-7	Napropamide	390	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	530	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	56-38-2	Parathion	110	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	110	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	1114-71-2	Pebulate	260	ug/Kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	200	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	26399-36-0	Profluralin	320	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	7287-19-6	Prometryne	130	ug/Kg	UJ
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	530	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	320	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	2312-35-8	Propargite	260	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	139-40-2	Propazine	130	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	31218-83-4	Propetamphos	260	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	299-84-3	Ronnel	92	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	122-34-9	Simazine	130	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	3689-24-5	Sulfotep	79	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	5902-51-2	Terbacil	390	ug/Kg	UJ
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	130	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	43121-43-3	Triademefon	340	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	2303-17-5	Triallate	390	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	1582-09-8	Trifluralin	200	ug/Kg	U
96374798	9/12/1996	Largescale Sucker	FS	Yakima River	Columbia River	49		16	5		N	2.3	EPA 8085	AED-Pest	1929-77-7	Vernolate	260	ug/Kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	1400	ug/kg	UJ
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	15972-60-8	Alachlor	830	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	834-12-8	Ametryn	230	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	1610-17-9	Atraton	350	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	1912-24-9	Atrazine	230	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	370	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	370	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	1861-40-1	Benefin	350	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	460	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	314-40-9	Bromacil	930	ug/kg	UJ
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	23184-66-9	Butachlor	1400	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	2008-41-5	Butylate	460	ug/kg	UJ
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	2425-06-1	Captafol	5600	ug/kg	UJ
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	133-06-2	Captan	320	ug/kg	UJ
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	786-19-6	Carbophenothion	2300	ug/kg	UJ
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	930	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	190	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	460	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	56-72-4	Coumaphos	280	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	350	ug/kg	UJ
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	1134-23-2	Cycloate	460	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	1897456	Daconil			R
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	120	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	78-48-8	DEF	320	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	2303-16-4	Diallate-II	1600	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	333-41-5	Diazinon	190	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	460	ug/kg	UJ
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	62737	Dichlorvos			R
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	60-57-1	Dieldrin	23	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	78-34-2	Dioxathion	390	ug/kg	UJ
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	957-51-7	Diphenamid	690	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	330-54-1	Diuron	1400	ug/kg	UJ
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	23	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	23	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	72-20-8	Endrin	23	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	23	ug/kg	UJ
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	23	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	2104-64-5	EPN	230	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	759-94-4	Eptam	460	ug/kg	UJ
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	350	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	563-12-2	Ethion	160	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	190	ug/kg	UJ
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	690	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	160	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	460	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	944-22-9	Fonophos	140	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	961-11-5	Gardona	460	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	732-11-6	Imidan	250	ug/kg	UJ
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	115322	Kelthane			R
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	121-75-5	Malathion	190	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	150505	Merphos			R
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	57837-19-1	Metaxyl	1400	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	930	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	23	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	190	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	230	ug/kg	UJ
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	113-48-4	MGK-264	1900	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	2212-67-1	Molinate	460	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	15299-99-7	Napropamide	690	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	930	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	56-38-2	Parathion	190	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	190	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	1114-71-2	Pebulate	460	ug/kg	UJ
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	350	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	26399-36-0	Profluralin	560	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	7287-19-6	Prometryne	230	ug/kg	UJ
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	930	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	560	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	2312-35-8	Propargite	460	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	139-40-2	Propazine	230	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	460	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	299-84-3	Ronnel	160	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	122-34-9	Simazine	230	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	140	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	5902-51-2	Terbacil	690	ug/kg	UJ
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	230	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	43121-43-3	Triademe fon	600	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	2303-17-5	Triallate	24	ug/kg	NJ
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	350	ug/kg	U
97070800	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	12.5	EPA 8085	AED-Pest	1929-77-7	Vernolate	460	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	1400	ug/kg	UJ
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	15972-60-8	Alachlor	860	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	834-12-8	Ametryn	240	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	1610-17-9	Atraton	360	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	1912-24-9	Atrazine	240	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	380	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	380	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	1861-40-1	Benefin	360	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	480	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	314-40-9	Bromacil	950	ug/kg	UJ
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	23184-66-9	Butachlor	1400	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	2008-41-5	Butylate	480	ug/kg	UJ
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	2425-06-1	Captafol	5700	ug/kg	UJ
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	133-06-2	Captan	330	ug/kg	UJ
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	786-19-6	Carbophenothion	2400	ug/kg	UJ
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	950	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	190	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	480	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	56-72-4	Coumaphos	290	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	21725-46-2	Cyanazine	360	ug/kg	UJ
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	1134-23-2	Cycloate	480	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	1897456	Daconil			R
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	120	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	78-48-8	DEF	330	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	2303-16-4	Diallate-II	1700	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	333-41-5	Diazinon	190	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	480	ug/kg	UJ
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	62737	Dichlorvos			R
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	60-57-1	Dieldrin	24	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	78-34-2	Dioxathion	400	ug/kg	UJ
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	957-51-7	Diphenamid	710	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	330-54-1	Diuron	1400	ug/kg	UJ
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	959-98-8	Endosulfan I	24	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	24	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	72-20-8	Endrin	24	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	24	ug/kg	UJ
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	24	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	2104-64-5	EPN	240	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	759-94-4	Eptam	480	ug/kg	UJ
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	360	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	563-12-2	Ethion	170	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	13194-48-4	Ethoprop	190	ug/kg	UJ
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	60168-88-9	Fenarimol	710	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	170	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	480	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	944-22-9	Fonophos	140	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	961-11-5	Gardona	480	ug/kg	

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	732-11-6	Imidan	260	ug/kg	UJ
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	115322	Kelthane			R
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	121-75-5	Malathion	190	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	150505	Merphos			R
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	1400	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	51218-45-2	Metholachlor	950	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	72-43-5	Methoxychlor	24	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	190	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	21087-64-9	Metribuzin	240	ug/kg	UJ
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	113-48-4	MGK-264	1900	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	2212-67-1	Molinate	480	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	15299-99-7	Napropamide	710	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	950	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	56-38-2	Parathion	190	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	190	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	1114-71-2	Pebulate	480	ug/kg	UJ
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	360	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	26399-36-0	Profluralin	570	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	7287-19-6	Prometryne	240	ug/kg	UJ
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	950	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	570	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	2312-35-8	Propargite	480	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	139-40-2	Propazine	240	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	31218-83-4	Propetamphos	480	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	299-84-3	Ronnel	170	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	122-34-9	Simazine	240	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	3689-24-5	Sulfotep	140	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	5902-51-2	Terbacil	710	ug/kg	UJ
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	240	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	43121-43-3	Triademefon	620	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	2303-17-5	Triallate	27	ug/kg	J
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	1582-09-8	Trifluralin	360	ug/kg	U
97070801	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13.3	EPA 8085	AED-Pest	1929-77-7	Veronolate	480	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	1400	ug/kg	UJ
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	15972-60-8	Alachlor	850	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	834-12-8	Ametryn	240	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	1610-17-9	Atraton	360	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	1912-24-9	Atrazine	240	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	380	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	380	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	1861-40-1	Benefin	360	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	470	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	314-40-9	Bromacil	950	ug/kg	UJ
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	23184-66-9	Butachlor	1400	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	2008-41-5	Butylate	470	ug/kg	UJ
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	2425-06-1	Captafol	5700	ug/kg	UJ
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	133-06-2	Captan	330	ug/kg	UJ
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	786-19-6	Carbophenothion	2400	ug/kg	UJ
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	950	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	190	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	470	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	56-72-4	Coumaphos	280	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	21725-46-2	Cyanazine	360	ug/kg	UJ
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	1134-23-2	Cycloate	470	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	1897456	Daconil			R
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	120	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	78-48-8	DEF	330	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	2303-16-4	Diallate-II	1700	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	333-41-5	Diazinon	190	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	470	ug/kg	UJ
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	62737	Dichlorvos			R
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	60-57-1	Dieldrin	24	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	78-34-2	Dioxathion	400	ug/kg	UJ
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	957-51-7	Diphenamid	710	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	330-54-1	Diuron	1400	ug/kg	UJ
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	959-98-8	Endosulfan I	24	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	24	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	72-20-8	Endrin	24	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	24	ug/kg	UJ
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	24	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	2104-64-5	EPN	240	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	759-94-4	Eptam	470	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	55283-68-6	Ethalfthuralin (Sonalan)	360	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	563-12-2	Ethion	170	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	13194-48-4	Ethoprop	190	ug/kg	UJ
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	60168-88-9	Fenarimol	710	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	170	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	470	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	944-22-9	Fonophos	140	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	961-11-5	Gardona	470	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	732-11-6	Imidan	260	ug/kg	UJ
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	115322	Kelthane			R
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	121-75-5	Malathion	190	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	150505	Merphos			R
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	1400	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	51218-45-2	Metholachlor	950	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	72-43-5	Methoxychlor	24	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	190	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	21087-64-9	Metribuzin	240	ug/kg	UJ
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	113-48-4	MGK-264	1900	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	2212-67-1	Molinate	470	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	15299-99-7	Napropamide	710	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	950	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	56-38-2	Parathion	190	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	190	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	1114-71-2	Pebulate	470	ug/kg	UJ
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	360	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	26399-36-0	Profluralin	570	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	7287-19-6	Prometryne	240	ug/kg	UJ
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	950	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	570	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	2312-35-8	Propargite	470	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	139-40-2	Propazine	240	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	31218-83-4	Propetamphos	470	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	299-84-3	Ronnel	170	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	122-34-9	Simazine	240	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	3689-24-5	Sulfotep	140	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	5902-51-2	Terbacil	710	ug/kg	UJ
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	240	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	43121-43-3	Triademefon	620	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	2303-17-5	Triallate	28	ug/kg	J
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	1582-09-8	Trifluralin	360	ug/kg	U
97070802	2/25/1997	Eulachon	WB	Columbia Rlver	Pacific Ocean	3	B	17	144		N	13	EPA 8085	AED-Pest	1929-77-7	Vernolate	470	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	740	ug/kg	UJ
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	15972-60-8	Alachlor	450	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	250	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	314-40-9	Bromacil	500	ug/kg	UJ
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	23184-66-9	Butachlor	740	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	2008-41-5	Butylate	250	ug/kg	UJ
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	2425-06-1	Captafol	3000	ug/kg	UJ
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	500	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	99	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/kg	UJ
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	1134-23-2	Cycloate	250	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	1897456	Daconil			R
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	62	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	2303-16-4	Diallate-II	870	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	333-41-5	Diazinon	99	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	250	ug/kg	UJ
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	60-57-1	Dieldrin	12	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	957-51-7	Diphenamid	370	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	330-54-1	Diuron	740	ug/kg	UJ
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	759-94-4	Eptam	250	ug/kg	UJ
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	190	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	563-12-2	Ethion	87	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	13194-48-4	Ethoprop	99	ug/kg	UJ
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	60168-88-9	Fenarimol	370	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	87	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	250	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	944-22-9	Fonophos	74	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	961-11-5	Gardona	250	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	115322	Kelthane			R
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	121-75-5	Malathion	99	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	150505	Merphos			R
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	740	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	51218-45-2	Metholachlor	500	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	99	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	113-48-4	MGK-264	990	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	2212-67-1	Molinate	250	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	15299-99-7	Napropamide	370	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	500	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	56-38-2	Parathion	99	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	99	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	1114-71-2	Pebulate	250	ug/kg	UJ
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	26399-36-0	Profluralin	300	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	500	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	300	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	2312-35-8	Propargite	250	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	31218-83-4	Propetamphos	250	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	299-84-3	Ronnel	87	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	3689-24-5	Sulfotep	74	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	5902-51-2	Terbacil	370	ug/kg	UJ
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	2303-17-5	Triallate	370	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/kg	U
97080800	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	D	18	5		N	8.1	EPA 8085	AED-Pest	1929-77-7	Vernolate	250	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	640	ug/kg	UJ
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	15972-60-8	Alachlor	390	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	834-12-8	Ametryn	110	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	1610-17-9	Atraton	160	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	1912-24-9	Atrazine	110	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	170	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	170	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	1861-40-1	Benefin	160	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	210	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	314-40-9	Bromacil	430	ug/kg	UJ
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	23184-66-9	Butachlor	640	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	2008-41-5	Butylate	210	ug/kg	UJ
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	2425-06-1	Captafol	2600	ug/kg	UJ
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	133-06-2	Captan	150	ug/kg	UJ
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1100	ug/kg	UJ
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	430	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	86	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	210	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	56-72-4	Coumaphos	130	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	21725-46-2	Cyanazine	160	ug/kg	UJ
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	1134-23-2	Cycloate	210	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	1897456	Daconil			R
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	54	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	78-48-8	DEF	150	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	2303-16-4	Diallate-II	750	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	333-41-5	Diazinon	86	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	210	ug/kg	UJ
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	60-57-1	Dieldrin	11	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	78-34-2	Dioxathion	180	ug/kg	UJ
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	957-51-7	Diphenamid	320	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	330-54-1	Diuron	640	ug/kg	UJ
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	959-98-8	Endosulfan I	11	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	11	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	72-20-8	Endrin	11	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	11	ug/kg	UJ
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	11	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	2104-64-5	EPN	110	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	759-94-4	Eptam	210	ug/kg	UJ
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	160	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	563-12-2	Ethion	75	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	13194-48-4	Ethoprop	86	ug/kg	UJ
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	60168-88-9	Fenarimol	320	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	75	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	210	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	944-22-9	Fonophos	64	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	961-11-5	Gardona	210	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	732-11-6	Imidan	120	ug/kg	UJ
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	115322	Kelthane			R
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	121-75-5	Malathion	86	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	150505	Mephos			R
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	57837-19-1	Metaxyl	640	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	51218-45-2	Metholachlor	430	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	72-43-5	Methoxychlor	11	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	86	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	21087-64-9	Metribuzin	110	ug/kg	UJ
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	113-48-4	MGK-264	860	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	2212-67-1	Molinate	210	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	15299-99-7	Napropamide	320	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	430	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	56-38-2	Parathion	86	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	86	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	1114-71-2	Pebulate	210	ug/kg	UJ
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	160	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	26399-36-0	Profluralin	260	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	7287-19-6	Prometryne	110	ug/kg	UJ
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	430	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	260	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	2312-35-8	Propargite	210	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	139-40-2	Propazine	110	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	31218-83-4	Propetamphos	210	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	299-84-3	Ronnel	75	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	122-34-9	Simazine	110	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	3689-24-5	Sulfotep	64	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	5902-51-2	Terbacil	320	ug/kg	UJ
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	110	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	43121-43-3	Triademefon	280	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	2303-17-5	Triallate	320	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	1582-09-8	Trifluralin	160	ug/kg	U
97080801	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	C	18	5		N	7	EPA 8085	AED-Pest	1929-77-7	Vernolate	210	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	710	ug/kg	UJ
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	15972-60-8	Alachlor	420	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	314-40-9	Bromacil	470	ug/kg	UJ
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	23184-66-9	Butachlor	710	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/kg	UJ
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	2425-06-1	Captafol	2800	ug/kg	UJ
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	470	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	94	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	56-72-4	Coumaphos	140	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/kg	UJ
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	1897456	Daconil			R
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	59	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	2303-16-4	Diallate-II	830	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	333-41-5	Diazinon	94	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/kg	UJ
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	60-57-1	Dieldrin	12	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	78-34-2	Dioxathion	200	ug/kg	UJ
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	957-51-7	Diphenamid	350	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	330-54-1	Diuron	710	ug/kg	UJ
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/kg	UJ
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	563-12-2	Ethion	83	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	13194-48-4	Ethoprop	94	ug/kg	UJ
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	60168-88-9	Fenarimol	350	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	83	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	944-22-9	Fonophos	71	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/kg	UJ
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	115322	Kelthane			R
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	121-75-5	Malathion	94	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	150505	Merphos			R
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	710	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	51218-45-2	Metholachlor	470	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	94	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	113-48-4	MGK-264	940	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	15299-99-7	Napropamide	350	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	470	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	56-38-2	Parathion	94	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	94	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/kg	UJ
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	26399-36-0	Profluralin	280	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	470	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	280	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	299-84-3	Ronnel	83	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	3689-24-5	Sulfotep	71	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	5902-51-2	Terbacil	350	ug/kg	UJ
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	43121-43-3	Triademefon	310	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	2303-17-5	Triallate	350	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/kg	U
97080802	2/25/1997	Largescale Sucker	WB	Deschutes River	Columbia River	98	B	18	5		N	10.4	EPA 8085	AED-Pest	1929-77-7	Vernolate	240	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	730	ug/kg	UJ
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	15972-60-8	Alachlor	440	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	314-40-9	Bromacil	490	ug/kg	UJ
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	23184-66-9	Butachlor	730	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/kg	UJ
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	2425-06-1	Captafol	2900	ug/kg	UJ
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	490	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	97	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/kg	UJ
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	1897456	Daconil			R
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	61	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	2303-16-4	Diallate-II	850	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	333-41-5	Diazinon	97	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/kg	UJ
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	60-57-1	Dieldrin	12	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	957-51-7	Diphenamid	360	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	330-54-1	Diuron	730	ug/kg	UJ
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/kg	UJ
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	563-12-2	Ethion	85	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	13194-48-4	Ethoprop	97	ug/kg	UJ
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	60168-88-9	Fenarimol	360	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	85	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	944-22-9	Fonophos	73	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/kg	UJ
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	115322	Kelthane			R
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	121-75-5	Malathion	97	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	150505	Merphos			R
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	730	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	51218-45-2	Metholachlor	490	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	97	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	113-48-4	MGK-264	970	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	15299-99-7	Napropamide	360	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	490	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	56-38-2	Parathion	97	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	97	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/kg	UJ
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	26399-36-0	Profluralin	290	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	490	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	290	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	299-84-3	Ronnel	85	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	3689-24-5	Sulfotep	73	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	5902-51-2	Terbacil	360	ug/kg	UJ
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	2303-17-5	Triallate	360	ug/kg	U
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080803	2/25/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	A	19	8		N	4.8	EPA 8085	AED-Pest	1929-77-7	Vernolate	240	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	710	ug/kg	UJ
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	15972-60-8	Alachlor	430	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	314-40-9	Bromacil	480	ug/kg	UJ
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	23184-66-9	Butachlor	710	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/kg	UJ
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	2425-06-1	Captafol	2900	ug/kg	UJ
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	480	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	95	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	56-72-4	Coumaphos	140	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/kg	UJ
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	1897456	Daconil			R
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	59	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	2303-16-4	Diallate-II	830	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	333-41-5	Diazinon	95	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/kg	UJ
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	60-57-1	Dieldrin	12	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	78-34-2	Dioxathion	200	ug/kg	UJ
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	957-51-7	Diphenamid	360	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	330-54-1	Diuron	710	ug/kg	UJ
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/kg	UJ
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	563-12-2	Ethion	83	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	13194-48-4	Ethoprop	95	ug/kg	UJ
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	60168-88-9	Fenarimol	360	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	83	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	944-22-9	Fonophos	71	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/kg	UJ
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	115322	Kelthane			R
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	121-75-5	Malathion	95	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	150505	Merphos			R
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	710	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	51218-45-2	Metholachlor	480	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	95	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	113-48-4	MGK-264	950	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	15299-99-7	Napropamide	360	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	480	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	56-38-2	Parathion	95	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	95	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/kg	UJ
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	26399-36-0	Profluralin	290	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	480	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	290	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	299-84-3	Ronnel	83	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	3689-24-5	Sulfotep	71	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	5902-51-2	Terbacil	360	ug/kg	UJ
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	43121-43-3	Triademefon	310	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	2303-17-5	Triallate	360	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/kg	U
97080804	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	D	21	13		N	4.3	EPA 8085	AED-Pest	1929-77-7	Vernolate	240	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	680	ug/kg	UJ
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	15972-60-8	Alachlor	410	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	834-12-8	Ametryn	110	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	1610-17-9	Atraton	170	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	1912-24-9	Atrazine	110	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	180	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	180	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	1861-40-1	Benefin	170	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	230	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	314-40-9	Bromacil	460	ug/kg	UJ
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	23184-66-9	Butachlor	680	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	2008-41-5	Butylate	230	ug/kg	UJ
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	2425-06-1	Captafol	2700	ug/kg	UJ
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	133-06-2	Captan	160	ug/kg	UJ
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1100	ug/kg	UJ
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	460	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	91	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	230	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	56-72-4	Coumaphos	140	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	170	ug/kg	UJ
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	1134-23-2	Cycloate	230	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	1897456	Daconil			R
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	57	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	78-48-8	DEF	160	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	2303-16-4	Diallate-II	800	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	333-41-5	Diazinon	91	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	230	ug/kg	UJ
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	60-57-1	Dieldrin	11	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	78-34-2	Dioxathion	190	ug/kg	UJ
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	957-51-7	Diphenamid	340	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	330-54-1	Diuron	680	ug/kg	UJ
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	11	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	11	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	72-20-8	Endrin	11	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	11	ug/kg	UJ
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	11	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	2104-64-5	EPN	110	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	759-94-4	Eptam	230	ug/kg	UJ
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	170	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	563-12-2	Ethion	80	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	91	ug/kg	UJ
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	340	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	80	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	230	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	944-22-9	Fonophos	68	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	961-11-5	Gardona	230	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/kg	UJ
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	115322	Kelthane			R
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	121-75-5	Malathion	91	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	150505	Merphos			R
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	680	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	460	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	11	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	91	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	110	ug/kg	UJ
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	113-48-4	MGK-264	910	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	2212-67-1	Molinate	230	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	15299-99-7	Napropamide	340	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	460	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	56-38-2	Parathion	91	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	91	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	1114-71-2	Pebulate	230	ug/kg	UJ

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	170	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	26399-36-0	Profluralin	270	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	7287-19-6	Prometryne	110	ug/kg	UJ
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	460	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	270	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	2312-35-8	Propargite	230	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	139-40-2	Propazine	110	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	230	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	299-84-3	Ronnel	80	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	122-34-9	Simazine	110	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	68	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	5902-51-2	Terbacil	340	ug/kg	UJ
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	110	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	43121-43-3	Triademefon	300	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	2303-17-5	Triallate	340	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	170	ug/kg	U
97080805	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	C	21	13		N	4.5	EPA 8085	AED-Pest	1929-77-7	Vernolate	230	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	750	ug/kg	UJ
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	15972-60-8	Alachlor	450	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	250	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	314-40-9	Bromacil	500	ug/kg	UJ
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	23184-66-9	Btachlor	750	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	2008-41-5	Butylate	250	ug/kg	UJ
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	2425-06-1	Captafol	3000	ug/kg	UJ
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	500	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	99	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/kg	UJ
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	1134-23-2	Dacloate	250	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	1897456	Daconil			R
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	62	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	2303-16-4	Diallate-II	870	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	333-41-5	Diazinon	99	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	250	ug/kg	UJ
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	60-57-1	Dieldrin	12	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	957-51-7	Diphenamid	370	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	330-54-1	Diuron	750	ug/kg	UJ
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	759-94-4	Eptam	250	ug/kg	UJ
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	190	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	563-12-2	Ethion	87	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	13194-48-4	Ethoprop	99	ug/kg	UJ
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	60168-88-9	Fenarimol	370	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	87	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	250	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	944-22-9	Fonophos	75	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	961-11-5	Gardona	250	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	115322	Kelthane			R
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	121-75-5	Malathion	99	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	150505	Merphos			R
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	57837-19-1	Metaxyl	750	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	51218-45-2	Metholachlor	500	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	99	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	113-48-4	MGK-264	990	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	2212-67-1	Molinate	250	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	15299-99-7	Napropamide	370	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	500	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	56-38-2	Parathion	99	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	99	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	1114-71-2	Pebulate	250	ug/kg	UJ
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	26399-36-0	Profluralin	300	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	500	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	300	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	2312-35-8	Propargite	250	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	31218-83-4	Propetamphos	250	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	299-84-3	Ronnel	87	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	3689-24-5	Sulfotep	75	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	5902-51-2	Terbacil	370	ug/kg	UJ
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	2303-17-5	Triallate	370	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/kg	U
97080806	2/18/1997	Mountain Whitefish	WB	Deschutes River	Columbia River	98	B	21	13		N	5.1	EPA 8085	AED-Pest	1929-77-7	Vernolate	250	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	650	ug/kg	UJ
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	15972-60-8	Alachlor	390	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	834-12-8	Ametryn	110	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	1610-17-9	Atraton	160	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	1912-24-9	Atrazine	110	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	170	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	170	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	1861-40-1	Benefin	160	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	220	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	314-40-9	Bromacil	430	ug/kg	UJ
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	23184-66-9	Butachlor	650	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	2008-41-5	Butylate	220	ug/kg	UJ
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	2425-06-1	Captafol	2600	ug/kg	UJ
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	133-06-2	Captan	150	ug/kg	UJ
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1100	ug/kg	UJ
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	430	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	87	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	220	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	56-72-4	Coumaphos	130	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	21725-46-2	Cyanazine	160	ug/kg	UJ
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	1134-23-2	Cycloate	220	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	1897456	Daconil			R
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	54	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	78-48-8	DEF	150	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	2303-16-4	Diallate-II	760	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	333-41-5	Diazinon	87	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	220	ug/kg	UJ
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	60-57-1	Dieldrin	11	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	78-34-2	Dioxathion	180	ug/kg	UJ
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	957-51-7	Diphenamid	330	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	330-54-1	Diuron	650	ug/kg	UJ
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	959-98-8	Endosulfan I	11	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	11	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	72-20-8	Endrin	11	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	11	ug/kg	UJ
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	11	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	2104-64-5	EPN	110	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	759-94-4	Eptam	220	ug/kg	UJ
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	160	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	563-12-2	Ethion	76	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	13194-48-4	Ethoprop	87	ug/kg	UJ
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	60168-88-9	Fenarimol	330	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	76	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	220	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	944-22-9	Fonophos	65	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	961-11-5	Gardona	220</		

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	732-11-6	Imidan	120	ug/kg	UJ
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	115322	Kelthane			R
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	121-75-5	Malathion	87	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	150505	Merphos			R
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	650	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	51218-45-2	Metholachlor	430	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	72-43-5	Methoxychlor	11	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	87	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	21087-64-9	Metribuzin	110	ug/kg	UJ
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	113-48-4	MGK-264	870	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	2212-67-1	Molinate	220	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	15299-99-7	Napropamide	330	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	430	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	56-38-2	Parathion	87	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	87	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	1114-71-2	Pebulate	220	ug/kg	UJ
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	160	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	26399-36-0	Profluralin	260	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	7287-19-6	Prometryne	110	ug/kg	UJ
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	430	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	260	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	2312-35-8	Propargite	220	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	139-40-2	Propazine	110	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	31218-83-4	Propetamphos	220	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	299-84-3	Ronnel	76	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	122-34-9	Simazine	110	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	3689-24-5	Sulfotep	65	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	5902-51-2	Terbacil	330	ug/kg	UJ
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	110	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	43121-43-3	Triademefon	280	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	2303-17-5	Triallate	330	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	1582-09-8	Trifluralin	160	ug/kg	U
97080807	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	N	2.4	EPA 8085	AED-Pest	1929-77-7	Verflorate	220	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	630	ug/kg	UJ
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	15972-60-8	Alachlor	380	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	834-12-8	Ametryn	100	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	1610-17-9	Atraton	160	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	1912-24-9	Atrazine	100	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	170	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	170	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	1861-40-1	Benefin	160	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	210	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	314-40-9	Bromacil	420	ug/kg	UJ
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	23184-66-9	Butachlor	630	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	2008-41-5	Butylate	210	ug/kg	UJ
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	2425-06-1	Captafol	2500	ug/kg	UJ
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	133-06-2	Captan	150	ug/kg	UJ
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1000	ug/kg	UJ
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	420	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	84	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	210	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	56-72-4	Coumaphos	130	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	21725-46-2	Cyanazine	160	ug/kg	UJ
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	1134-23-2	Cycloate	210	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	1897456	Daconil			R
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	52	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	78-48-8	DEF	150	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	2303-16-4	Diallate-II	730	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	333-41-5	Diazinon	84	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	210	ug/kg	UJ
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	60-57-1	Dieldrin	10	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	78-34-2	Dioxathion	180	ug/kg	UJ
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	957-51-7	Diphenamid	310	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	330-54-1	Diuron	630	ug/kg	UJ
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	959-98-8	Endosulfan I	10	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	10	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	72-20-8	Endrin	10	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	10	ug/kg	UJ
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	10	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	2104-64-5	EPN	100	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	759-94-4</				

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	55283-68-6	Ethalfthuralin (Sonalan)	160	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	563-12-2	Ethion	73	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	13194-48-4	Ethoprop	84	ug/kg	UJ
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	60168-88-9	Fenarimol	310	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	73	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	210	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	944-22-9	Fonophos	63	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	961-11-5	Gardona	210	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	UJ
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	115322	Kelthane			R
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	121-75-5	Malathion	84	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	150505	Merphos			R
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	630	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	51218-45-2	Metholachlor	420	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	72-43-5	Methoxychlor	10	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	84	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	21087-64-9	Metribuzin	100	ug/kg	UJ
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	113-48-4	MGK-264	840	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	2212-67-1	Molinate	210	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	15299-99-7	Napropamide	310	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	420	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	56-38-2	Parathion	84	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	84	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	1114-71-2	Pebulate	210	ug/kg	UJ
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	160	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	26399-36-0	Profluralin	250	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	7287-19-6	Prometryne	100	ug/kg	UJ
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	420	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	250	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	2312-35-8	Propargite	210	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	139-40-2	Propazine	100	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	31218-83-4	Propetamphos	210	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	299-84-3	Ronnel	73	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	122-34-9	Simazine	100	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	3689-24-5	Sulfotep	63	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	5902-51-2	Terbacil	310	ug/kg	UJ
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	100	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	43121-43-3	Triadefon	270	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	2303-17-5	Triallate	310	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	1582-09-8	Trifluralin	160	ug/kg	U
97080808	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	18	1	D	2.6	EPA 8085	AED-Pest	1929-77-7	Vernolate	210	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	630	ug/kg	UJ
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	15972-60-8	Alachlor	380	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	834-12-8	Ametryn	100	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	1610-17-9	Atraton	160	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	1912-24-9	Atrazine	100	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	170	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	170	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	1861-40-1	Benefin	160	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	210	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	314-40-9	Bromacil	420	ug/kg	UJ
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	23184-66-9	Butachlor	630	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	2008-41-5	Butylate	210	ug/kg	UJ
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	2425-06-1	Captafol	2500	ug/kg	UJ
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	133-06-2	Captan	150	ug/kg	UJ
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1000	ug/kg	UJ
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	420	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	83	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	210	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	56-72-4	Coumaphos	130	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	21725-46-2	Cyanazine	160	ug/kg	UJ
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	1134-23-2	Cycloate	210	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	1897456	Daconil			R
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	52	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	78-48-8	DEF	150	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	2303-16-4	Diallate-II	730	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	333-41-5	Diazinon	83	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	210	ug/kg	UJ
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	60-57-1	Dieldrin	10	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	78-34-2	Dioxathion	180	ug/kg	UJ
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	957-51-7	Diphenamid	310	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	330-54-1	Diuron	630	ug/kg	UJ
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	959-98-8	Endosulfan I	10	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	10	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	72-20-8	Endrin	10	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	10	ug/kg	UJ
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	10	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	2104-64-5	EPN	100	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	759-94-4	Eptam	210	ug/kg	UJ
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	160	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	563-12-2	Ethion	73	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	13194-48-4	Ethoprop	83	ug/kg	UJ
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	60168-88-9	Fenarimol	310	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	73	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	210	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	944-22-9	Fonophos	63	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	961-11-5	Gardona	210	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	UJ
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	115322	Kelthane			R
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	121-75-5	Malathion	83	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	150505	Merphos			R
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	630	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	51218-45-2	Metholachlor	420	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	72-43-5	Methoxychlor	10	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	83	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	21087-64-9	Metribuzin	100	ug/kg	UJ
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	113-48-4	MGK-264	830	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	2212-67-1	Molinate	210	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	15299-99-7	Napropamide	310	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	420	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	56-38-2	Parathion	83	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	83	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	1114-71-2	Pebulate	210	ug/kg	UJ
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	160	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	26399-36-0	Profluralin	250	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	7287-19-6	Prometryne	100	ug/kg	UJ
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	420	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	250	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	2312-35-8	Propargite	210	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	139-40-2	Propazine	100	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	31218-83-4	Propetamphos	210	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	299-84-3	Ronnel	73	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	122-34-9	Simazine	100	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	3689-24-5	Sulfotep	63	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	5902-51-2	Terbacil	310	ug/kg	UJ
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	100	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	43121-43-3	Triademefon	270	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	2303-17-5	Triallate	310	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	1582-09-8	Trifluralin	160	ug/kg	U
97080809	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	B	22	13		N	1.2	EPA 8085	AED-Pest	1929-77-7	Vernolate	210	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	700	ug/kg	UJ
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	15972-60-8	Alachlor	420	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	1610-17-9	Atraton	170	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	1861-40-1	Benefin	170	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	230	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	314-40-9	Bromacil	470	ug/kg	UJ
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	23184-66-9	Butachlor	700	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	2008-41-5	Butylate	230	ug/kg	UJ
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	2425-06-1	Captafol	2800	ug/kg	UJ
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	133-06-2	Captan	160	ug/kg	UJ
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	470	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	93	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	230	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	56-72-4	Coumaphos	140	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	21725-46-2	Cyanazine	170	ug/kg	UJ
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	1134-23-2	Cycloate	230	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	1897456	Daconil			R
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	58	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	78-48-8	DEF	160	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	2303-16-4	Diallate-II	810	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	333-41-5	Diazinon	93	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	230	ug/kg	UJ
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	60-57-1	Dieldrin	12	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	78-34-2	Dioxathion	200	ug/kg	UJ
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	957-51-7	Diphenamid	350	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	330-54-1	Diuron	700	ug/kg	UJ
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	759-94-4	Eptam	230	ug/kg	UJ
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	170	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	563-12-2	Ethion	81	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	13194-48-4	Ethoprop	93	ug/kg	UJ
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	60168-88-9	Fenarimol	350	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	81	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	230	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	944-22-9	Fonophos	70	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	961-11-5	Gardona	230	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/kg	UJ
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	115322	Kelthane			R
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	121-75-5	Malathion	93	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	150505	Merphos			R
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	57837-19-1	Metaxyl	700	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	51218-45-2	Metholachlor	470	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	93	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	113-48-4	MGK-264	930	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	2212-67-1	Molinate	230	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	15299-99-7	Napropamide	350	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	470	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	56-38-2	Parathion	93	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	93	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	1114-71-2	Pebulate	230	ug/kg	UJ
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	170	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	26399-36-0	Profluralin	280	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	470	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	280	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	2312-35-8	Propargite	230	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	31218-83-4	Propetamphos	230	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	299-84-3	Ronnel	81	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	3689-24-5	Sulfotep	70	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	5902-51-2	Terbacil	350	ug/kg	UJ
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	43121-43-3	Triademefon	300	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	2303-17-5	Triallate	350	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	1582-09-8	Trifluralin	170	ug/kg	U
97080810	2/18/1997	Mountain Whitefish	FS	Deschutes River	Columbia River	98	A	22	13		N	2.9	EPA 8085	AED-Pest	1929-77-7	Vernolate	230	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	720	ug/kg	UJ
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	15972-60-8	Alachlor	430	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	314-40-9	Bromacil	480	ug/kg	UJ
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	23184-66-9	Butachlor	720	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/kg	UJ
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	2425-06-1	Captafol	2900	ug/kg	UJ
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	480	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	96	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	56-72-4	Coumaphos	140	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/kg	UJ
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	1897456	Daconil			R
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	60	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	2303-16-4	Diallate-II	840	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	333-41-5	Diazinon	96	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/kg	UJ
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	60-57-1	Dieldrin	5.7	ug/kg	J
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	78-34-2	Dioxathion	200	ug/kg	UJ
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	957-51-7	Diphenamid	360	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	330-54-1	Diuron	720	ug/kg	UJ
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/kg	UJ
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	563-12-2	Ethion	84	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	13194-48-4	Ethoprop	96	ug/kg	UJ
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	60168-88-9	Fenarimol	360	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	84	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	944-22-9	Fonophos	72	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.6	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/kg	UJ
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	115322	Kelthane			R
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	121-75-5	Malathion	96	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	150505	Merphos			R
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	720	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	51218-45-2	Metholachlor	480	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	96	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	113-48-4	MGK-264	960	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	15299-99-7	Napropamide	360	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	480	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	56-38-2	Parathion	96	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	96	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/kg	UJ
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	5.2	ug/kg	J
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	26399-36-0	Profluralin	290	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	480	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	290	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	299-84-3	Ronnel	84	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	3689-24-5	Sulfotep	72	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	5902-51-2	Terbacil	360	ug/kg	UJ
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	11	ug/kg	J
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	43121-43-3	Triademefon	310	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	2303-17-5	Triallate	2.9	ug/kg	NJ
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/kg	U
97080811	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	N	4.8	EPA 8085	AED-Pest	1929-77-7	Trifluralin	240	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	740	ug/kg	UJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	15972-60-8	Alachlor	450	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	250	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	314-40-9	Bromacil	500	ug/kg	UJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	23184-66-9	Butachlor	740	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	2008-41-5	Butylate	250	ug/kg	UJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	2425-06-1	Captafol	3000	ug/kg	UJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	500	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	99	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/kg	UJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	1134-23-2	Cycloate	250	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	1897456	Daconil			R
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	62	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	2303-16-4	Diallate-II	870	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	333-41-5	Diazinon	99	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	250	ug/kg	UJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	60-57-1	Dieldrin	3.7	ug/kg	J
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	957-51-7	Diphenamid	370	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	330-54-1	Diuron	740	ug/kg	UJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	759-94-4	Eptam	250	ug/kg	UJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	190	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	563-12-2	Ethion	87	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	13194-48-4	Ethoprop	99	ug/kg	UJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	60168-88-9	Fenarimol	370	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	87	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	250	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	944-22-9	Fonophos	74	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	961-11-5	Gardona	250	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	2.5	ug/kg	NJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	115322	Kelthane			R
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	121-75-5	Malathion	99	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	150505	Merphos			R
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	57837-19-1	Metaxyl	740	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	51218-45-2	Metholachlor	500	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	99	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	113-48-4	MGK-264	990	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	2212-67-1	Molinate	250	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	15299-99-7	Napropamide	370	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	500	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	56-38-2	Parathion	99	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	99	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	1114-71-2	Pebulate	250	ug/kg	UJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	6.7	ug/kg	J
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	26399-36-0	Profluralin	300	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	500	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	300	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	2312-35-8	Propargite	250	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	31218-83-4	Propetamphos	250	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	299-84-3	Ronnel	87	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	3689-24-5	Sulfotep	74	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	5902-51-2	Terbacil	370	ug/kg	UJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	11	ug/kg	J
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	2303-17-5	Triallate	3.2	ug/kg	NJ
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/kg	U
97080812	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	3.8	EPA 8085	AED-Pest	1929-77-7	Vernolate	250	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	740	ug/kg	UJ
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	15972-60-8	Alachlor	450	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	250	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	314-40-9	Bromacil	490	ug/kg	UJ
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	23184-66-9	Butachlor	740	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	2008-41-5	Butylate	250	ug/kg	UJ
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	2425-06-1	Captafol	3000	ug/kg	UJ
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	490	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	99	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/kg	UJ
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	1134-23-2	Dacloate	250	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	1897456	Daconil			R
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	62	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	2303-16-4	Diallate-II	870	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	333-41-5	Diazinon	99	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	250	ug/kg	UJ
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	60-57-1	Dieldrin	2.7	ug/kg	J
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	957-51-7	Diphenamid	370	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	330-54-1	Diuron	740	ug/kg	UJ
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	759-94-4	Eptam	250	ug/kg	UJ
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	190	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	563-12-2	Ethion	87	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	99	ug/kg	UJ
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	370	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	87	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	250	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	944-22-9	Fonophos	74	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	961-11-5	Gardona	250	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.9	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	115322	Kelthane			R
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	121-75-5	Malathion	99	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	150505	Merphos			R
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	740	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	490	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	99	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	113-48-4	MGK-264	990	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	2212-67-1	Molinate	250	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	15299-99-7	Napropamide	370	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	490	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	56-38-2	Parathion	99	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	99	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	1114-71-2	Pebulate	250	ug/kg	UJ
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	3.8	ug/kg	J
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	26399-36-0	Profluralin	300	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	490	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	300	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	2312-35-8	Propargite	250	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	250	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	299-84-3	Ronnel	87	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	74	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	5902-51-2	Terbacil	370	ug/kg	UJ
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	11	ug/kg	J
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	2303-17-5	Triallate	2.3	ug/kg	NJ
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/kg	U
97080813	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1		N	1.5	EPA 8085	AED-Pest	1929-77-7	Trifluralin	250	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	740	ug/kg	UJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	15972-60-8	Alachlor	440	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	250	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	314-40-9	Bromacil	490	ug/kg	UJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	23184-66-9	Butachlor	740	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	2008-41-5	Butylate	250	ug/kg	UJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	2425-06-1	Captafol	3000	ug/kg	UJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	490	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	99	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/kg	UJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	1134-23-2	Cycloate	250	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	1897456	Daconil			R
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	62	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	2303-16-4	Diallate-II	860	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	333-41-5	Diazinon	99	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	250	ug/kg	UJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	60-57-1	Dieldrin	2.4	ug/kg	NJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	957-51-7	Diphenamid	370	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	330-54-1	Diuron	740	ug/kg	UJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	759-94-4	Eptam	250	ug/kg	UJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	190	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	563-12-2	Ethion	86	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	13194-48-4	Ethoprop	99	ug/kg	UJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	60168-88-9	Fenarimol	370	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	86	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	250	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	944-22-9	Fonophos	74	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	961-11-5	Gardona	250	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.9	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	115322	Kelthane			R
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	121-75-5	Malathion	99	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	150505	Merphos			R
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	740	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	51218-45-2	Metholachlor	490	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	99	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	113-48-4	MGK-264	990	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	2212-67-1	Molinate	250	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	15299-99-7	Napropamide	370	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	490	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	56-38-2	Parathion	99	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	99	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	1114-71-2	Pebulate	250	ug/kg	UJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	2.8	ug/kg	J
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	26399-36-0	Profluralin	300	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	490	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	300	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	2312-35-8	Propargite	250	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	31218-83-4	Propetamphos	250	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	299-84-3	Ronnel	86	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	3689-24-5	Sulfotep	74	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	5902-51-2	Terbacil	370	ug/kg	UJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	10	ug/kg	J
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	2303-17-5	Triallate	2.1	ug/kg	NJ
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/kg	U
97080814	2/18/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	6	C	23	1	2	D	3.1	EPA 8085	AED-Pest	1929-77-7	Vernolate	250	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	720	ug/kg	UJ
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	15972-60-8	Alachlor	430	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	314-40-9	Bromacil	480	ug/kg	UJ
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	23184-66-9	Butachlor	720	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/kg	UJ
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	2425-06-1	Captafol	2900	ug/kg	UJ
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	480	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	97	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	56-72-4	Coumaphos	140	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/kg	UJ
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	1897456	Daconil			R
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	60	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	2303-16-4	Diallate-II	840	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	333-41-5	Diazinon	97	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/kg	UJ
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	60-57-1	Dieldrin	2.9	ug/kg	NJ
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	957-51-7	Diphenamid	360	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	330-54-1	Diuron	720	ug/kg	UJ
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/kg	UJ
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	563-12-2	Ethion	84	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	13194-48-4	Ethoprop	97	ug/kg	UJ
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	60168-88-9	Fenarimol	360	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	84	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	944-22-9	Fonophos	72	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.7	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/kg	UJ
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	115322	Kelthane			R
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	121-75-5	Malathion	97	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	150505	Merphos			R
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	720	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	51218-45-2	Metholachlor	480	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	97	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	113-48-4	MGK-264	970	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	15299-99-7	Napropamide	360	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	480	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	56-38-2	Parathion	97	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	97	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/kg	UJ
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	unknown	Methyl Chlorpyrifos	9.7	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	26399-36-0	Profluralin	290	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	480	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	290	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	299-84-3	Ronnel	84	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	3689-24-5	Sulfotep	72	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	5902-51-2	Terbacil	360	ug/kg	UJ
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	8.1	ug/kg	J
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	43121-43-3	Triademefon	310	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	2303-17-5	Triallate	4.3	ug/kg	J
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/kg	U
97080815	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	5.3	EPA 8085	AED-Pest	1929-77-7	Vernolate	240	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	730	ug/kg	UJ
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	15972-60-8	Alachlor	440	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	314-40-9	Bromacil	480	ug/kg	UJ
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	23184-66-9	Butachlor	730	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/kg	UJ
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	2425-06-1	Captafol	2900	ug/kg	UJ
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	480	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	97	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/kg	UJ
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	1897456	Daconil			R
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	61	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	2303-16-4	Diallate-II	850	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	333-41-5	Diazinon	97	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/kg	UJ
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	60-57-1	Dieldrin	12	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	957-51-7	Diphenamid	360	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	330-54-1	Diuron	730	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/kg	UJ
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	563-12-2	Ethion	85	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	13194-48-4	Ethoprop	97	ug/kg	UJ
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	60168-88-9	Fenarimol	360	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	85	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	944-22-9	Fonophos	73	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.7	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/kg	UJ
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	115322	Kelthane			R
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	121-75-5	Malathion	97	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	150505	Merphos			R
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	730	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	51218-45-2	Metholachlor	480	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	97	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	113-48-4	MGK-264	970	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	15299-99-7	Napropamide	360	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	480	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	56-38-2	Parathion	97	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	97	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/kg	UJ
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	9.7	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	26399-36-0	Profluralin	290	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	480	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	290	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	299-84-3	Ronnel	85	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	3689-24-5	Sulfotep	73	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	5902-51-2	Terbacil	360	ug/kg	UJ
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	3.5	ug/kg	NJ
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	43121-43-3	Triademefon	310	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	2303-17-5	Triallate	2.1	ug/kg	NJ
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/kg	U
97080816	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	1.8	EPA 8085	AED-Pest	1929-77-7	Vernolate	240	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	740	ug/kg	UJ
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	15972-60-8	Alachlor	440	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	250	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	314-40-9	Bromacil	490	ug/kg	UJ
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	23184-66-9	Butachlor	740	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	2008-41-5	Butylate	250	ug/kg	UJ
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	2425-06-1	Captafol	2900	ug/kg	UJ
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	490	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	5598-13-0	Azinpyrifos-methyl	98	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/kg	UJ
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	1134-23-2	Cycloate	250	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	1897456	Daconil			R
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	61	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	2303-16-4	Diallate-II	860	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	333-41-5	Diazinon	98	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	250	ug/kg	UJ
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	60-57-1	Dieldrin	6.1	ug/kg	J
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	957-51-7	Diphenamid	370	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	330-54-1	Diuron	740	ug/kg	UJ
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	759-94-4	Eptam	250	ug/kg	UJ
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	563-12-2	Ethion	86	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	13194-48-4	Ethoprop	98	ug/kg	UJ
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	60168-88-9	Fenarimol	370	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	86	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	250	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	944-22-9	Fonophos	74	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	961-11-5	Gardona	250	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	3	ug/kg	NJ
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/kg	UJ
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	115322	Kelthane			R
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	121-75-5	Malathion	98	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	150505	Merphos			R
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	740	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	51218-45-2	Metholachlor	490	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	98	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	113-48-4	MGK-264	980	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	2212-67-1	Molinate	250	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	15299-99-7	Napropamide	370	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	490	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	56-38-2	Parathion	98	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	98	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	1114-71-2	Pebutate	250	ug/kg	UJ
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	6.7	ug/kg	J
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	26399-36-0	Profluralin	290	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	490	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	290	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	2312-35-8	Propargite	250	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	31218-83-4	Propetamphos	250	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	299-84-3	Ronnel	86	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	3689-24-5	Sulfotep	74	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	5902-51-2	Terbacil	370	ug/kg	UJ
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	unknown	Terabromodiphenyl ether	13	ug/kg	J
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	2303-17-5	Triallate	5.4	ug/kg	J
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/kg	U
97080817	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	7	A	24	1		N	7.6	EPA 8085	AED-Pest	1929-77-7	Vernolate	250	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	720	ug/kg	UJ
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	15972-60-8	Alachlor	430	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	314-40-9	Bromacil	480	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	23184-66-9	Butachlor	720	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/kg	UJ
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	2425-06-1	Captafol	2900	ug/kg	UJ
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	480	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	96	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	56-72-4	Coumaphos	140	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/kg	UJ
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	1897456	Daconil			R
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	60	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	2303-16-4	Diallate-II	840	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	333-41-5	Diazinon	96	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/kg	UJ
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	60-57-1	Dieldrin	1.6	ug/kg	NJ
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	78-34-2	Dioxathion	200	ug/kg	UJ
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	957-51-7	Diphenamid	360	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	330-54-1	Diuron	720	ug/kg	UJ
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/kg	UJ
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	563-12-2	Ethion	84	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	13194-48-4	Ethoprop	96	ug/kg	UJ
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	60168-88-9	Fenarimol	360	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	84	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	944-22-9	Fonophos	72	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.6	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/kg	UJ
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	115322	Kelthane			R
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	121-75-5	Malathion	96	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	150505	Merphos			R
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	720	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	51218-45-2	Metholachlor	480	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	96	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	113-48-4	MKG-264	960	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	15299-99-7	Napropamide	360	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	480	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	56-38-2	Parathion	96	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	96	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/kg	UJ
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	9.6	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	26399-36-0	Profluralin	290	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	480	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	290	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	299-84-3	Ronnel	84	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	3689-24-5	Sulfotep	72	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	5902-51-2	Terbacil	360	ug/kg	UJ
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	7	ug/kg	J
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	43121-43-3	Triademefon	310	ug/kg	U
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	2303-17-5	Triallate	5.8	ug/kg	NJ
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080818	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	4.1	EPA 8085	AED-Pest	1929-77-7	Vernolate	240	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	760	ug/kg	UJ
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	15972-60-8	Alachlor	460	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	834-12-8	Ametryn	130	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	1912-24-9	Atrazine	130	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	250	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	314-40-9	Bromacil	510	ug/kg	UJ
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	23184-66-9	Butachlor	760	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	2008-41-5	Butylate	250	ug/kg	UJ
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	2425-06-1	Captafol	3000	ug/kg	UJ
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	133-06-2	Captan	180	ug/kg	UJ
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1300	ug/kg	UJ
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	510	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	100	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/kg	UJ
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	1134-23-2	Cycloate	250	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	1897456	Daconil			R
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	63	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	78-48-8	DEF	180	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	2303-16-4	Diallate-II	890	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	333-41-5	Diazinon	100	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	250	ug/kg	UJ
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	60-57-1	Dieldrin	3.8	ug/kg	J
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	78-34-2	Dioxathion	220	ug/kg	UJ
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	957-51-7	Diphenamid	380	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	330-54-1	Diuron	760	ug/kg	UJ
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	959-98-8	Endosulfan I	13	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	13	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	72-20-8	Endrin	13	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	13	ug/kg	UJ
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	13	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	2104-64-5	EPN	130	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	759-94-4	Eptam	250	ug/kg	UJ
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	190	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	563-12-2	Ethion	89	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	13194-48-4	Ethoprop	100	ug/kg	UJ
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	60168-88-9	Fenarimol	380	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	89	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	250	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	944-22-9	Fonophos	76	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	961-11-5	Gardona	250	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	10	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	115322	Kelthane			R
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	121-75-5	Malathion	100	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	150505	Merphos			R
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	760	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	51218-45-2	Metholachlor	510	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	72-43-5	Methoxychlor	13	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	100	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	21087-64-9	Metribuzin	130	ug/kg	UJ
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	113-48-4	MGK-264	1000	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	2212-67-1	Molinate	250	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	15299-99-7	Napropamide	380	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	510	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	56-38-2	Parathion	100	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	100	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	1114-71-2	Pebulate	250	ug/kg	UJ
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	3	ug/kg	NJ
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	26399-36-0	Profluralin	300	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	7287-19-6	Prometryne	130	ug/kg	UJ
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	510	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	300	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	2312-35-8	Propargite	250	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	139-40-2	Propazine	130	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	31218-83-4	Propetamphos	250	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	299-84-3	Ronnel	89	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	122-34-9	Simazine	130	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	3689-24-5	Sulfotep	76	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	5902-51-2	Terbacil	380	ug/kg	UJ
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	130	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	7.9	ug/kg	J
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	43121-43-3	Triademefon	330	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	2303-17-5	Triallate	13	ug/kg	J
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/kg	U
97080819	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	10	EPA 8085	AED-Pest	1929-77-7	Vernolate	250	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	730	ug/kg	UJ
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	15972-60-8	Alachlor	440	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	314-40-9	Bromacil	490	ug/kg	UJ
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	23184-66-9	Btachlor	730	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/kg	UJ
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	2425-06-1	Captafol	2900	ug/kg	UJ
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	490	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	97	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/kg	UJ
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	1134-23-2	Dacloate	240	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	1897456	Daconil			R
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	61	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	2303-16-4	Diallate-II	850	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	333-41-5	Diazinon	97	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/kg	UJ
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	60-57-1	Dieldrin	3.8	ug/kg	J
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	957-51-7	Diphenamid	360	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	330-54-1	Diuron	730	ug/kg	UJ
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/kg	UJ
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	563-12-2	Ethion	85	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	13194-48-4	Ethoprop	97	ug/kg	UJ
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	60168-88-9	Fenarimol	360	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	85	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	944-22-9	Fonophos	73	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.7	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/kg	UJ
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	115322	Kelthane			R
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	121-75-5	Malathion	97	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	150505	Merphos			R
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	730	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	51218-45-2	Metholachlor	490	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	97	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	113-48-4	MGK-264	970	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	15299-99-7	Napropamide	360	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	490	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	56-38-2	Parathion	97	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	97	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/kg	UJ
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	9.7	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	26399-36-0	Profluralin	290	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	490	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	290	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	299-84-3	Ronnel	85	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	3689-24-5	Sulfotep	73	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	5902-51-2	Terbacil	360	ug/kg	UJ
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	8.2	ug/kg	J
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	2303-17-5	Triallate	8	ug/kg	J
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/kg	U
97080820	2/19/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	8	F	25	1		N	9.1	EPA 8085	AED-Pest	1929-77-7	Trifluralin	240	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	750	ug/kg	UJ
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	15972-60-8	Alachlor	450	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	834-12-8	Ametryn	130	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	1912-24-9	Atrazine	130	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	250	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	314-40-9	Bromacil	500	ug/kg	UJ
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	23184-66-9	Butachlor	750	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	2008-41-5	Butylate	250	ug/kg	UJ
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	2425-06-1	Captafol	3000	ug/kg	UJ
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	133-06-2	Captan	180	ug/kg	UJ
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1300	ug/kg	UJ
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	500	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	100	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/kg	UJ
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	1134-23-2	Cycloate	250	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	1897456	Daconil			R
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	63	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	78-48-8	DEF	180	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	2303-16-4	Diallate-II	880	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	333-41-5	Diazinon	100	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	250	ug/kg	UJ
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	60-57-1	Dieldrin	13	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	957-51-7	Diphenamid	380	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	330-54-1	Diuron	750	ug/kg	UJ
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	959-98-8	Endosulfan I	13	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	13	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	72-20-8	Endrin	13	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	13	ug/kg	UJ
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	13	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	2104-64-5	EPN	130	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	759-94-4	Eptam	250	ug/kg	UJ
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	190	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	563-12-2	Ethion	88	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	13194-48-4	Ethoprop	100	ug/kg	UJ
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	60168-88-9	Fenarimol	380	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	88	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	250	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	944-22-9	Fonophos	75	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	961-11-5	Gardona	250	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	115322	Kelthane			R

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	121-75-5	Malathion	100	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	150505	Merphos			R
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	750	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	51218-45-2	Metholachlor	500	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	72-43-5	Methoxychlor	13	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	100	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	21087-64-9	Metribuzin	130	ug/kg	UJ
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	113-48-4	MGK-264	1000	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	2212-67-1	Molinate	250	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	15299-99-7	Napropamide	380	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	500	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	56-38-2	Parathion	100	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	100	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	1114-71-2	Pebulate	250	ug/kg	UJ
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	26399-36-0	Profluralin	300	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	7287-19-6	Prometryne	130	ug/kg	UJ
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	500	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	300	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	2312-35-8	Propargite	250	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	139-40-2	Propazine	130	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	31218-83-4	Propetamphos	250	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	299-84-3	Ronnel	88	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	122-34-9	Simazine	130	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	3689-24-5	Sulfotep	75	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	5902-51-2	Terbacil	380	ug/kg	UJ
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	130	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	43121-43-3	Triademefon	330	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	2303-17-5	Triallate	380	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/kg	U
97080821	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	E	19	8		N	4.3	EPA 8085	AED-Pest	1929-77-7	Vernolate	250	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	720	ug/kg	UJ
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	15972-60-8	Alachlor	430	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	314-40-9	Bromacil	480	ug/kg	UJ
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	23184-66-9	Butachlor	720	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/kg	UJ
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	2425-06-1	Captafol	2900	ug/kg	UJ
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	480	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	96	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	56-72-4	Coumaphos	140	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/kg	UJ
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	1897456	Daconil			R
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	60	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	2303-16-4	Diallate-II	840	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	333-41-5	Diazinon	96	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/kg	UJ
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	60-57-1	Dieldrin	12	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	78-34-2	Dioxathion	200	ug/kg	UJ
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	957-51-7	Diphenamid	360	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	330-54-1	Diuron	720	ug/kg	UJ
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/kg	UJ
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	563-12-2	Ethion	84	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	13194-48-4	Ethoprop	96	ug/kg	UJ
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	60168-88-9	Fenarimol	360	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	84	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	944-22-9	Fonophos	72	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/kg	UJ
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	115322	Kelthane			R
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	121-75-5	Malathion	96	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	150505	Merphos			R
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	720	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	51218-45-2	Metholachlor	480	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	96	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	113-48-4	MGK-264	960	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	15299-99-7	Napropamide	360	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	480	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	56-38-2	Parathion	96	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	96	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/kg	UJ
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	26399-36-0	Profluralin	290	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	480	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	290	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	299-84-3	Ronnel	84	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	3689-24-5	Sulfotep	72	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	5902-51-2	Terbacil	360	ug/kg	UJ
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	43121-43-3	Triademefon	310	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	2303-17-5	Triallate	360	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/kg	U
97080822	2/19/1997	Rainbow Trout	WB	Deschutes River	Columbia River	98	D	19	8		N	4.2	EPA 8085	AED-Pest	1929-77-7	Vernolate	240	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	720	ug/kg	UJ
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	15972-60-8	Alachlor	430	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	314-40-9	Bromacil	480	ug/kg	UJ
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	23184-66-9	Butachlor	720	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/kg	UJ
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	2425-06-1	Captafol	2900	ug/kg	UJ
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	480	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	96	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	56-72-4	Coumaphos	140	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/kg	UJ
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	1897456	Daconil			R
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	60	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	2303-16-4	Diallate-II	840	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	333-41-5	Diazinon	96	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/kg	UJ
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	60-57-1	Dieldrin	2.3	ug/kg	NJ
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	78-34-2	Dioxathion	200	ug/kg	UJ
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	957-51-7	Diphenamid	360	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	330-54-1	Diuron	720	ug/kg	UJ
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/kg	UJ
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	563-12-2	Ethion	84	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	13194-48-4	Ethoprop	96	ug/kg	UJ
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	60168-88-9	Fenarimol	360	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	84	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	944-22-9	Fenophos	72	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/kg	UJ
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	115322	Kelthane			R
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	121-75-5	Malathion	96	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	150505	Merphos			R
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	720	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	51218-45-2	Metholachlor	480	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	96	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	113-48-4	MGK-264	960	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	15299-99-7	Napropamide	360	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	480	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	56-38-2	Parathion	96	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	96	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/kg	UJ
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	26399-36-0	Profluralin	290	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	480	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	290	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	299-84-3	Ronnel	84	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	3689-24-5	Sulfotep	72	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	5902-51-2	Terbacil	360	ug/kg	UJ
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	43121-43-3	Triademefon	310	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	2303-17-5	Triallate	360	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/kg	U
97080823	2/19/1997	Rainbow Trout	FS	Deschutes River	Columbia River	98	B	20	11		N	3.2	EPA 8085	AED-Pest	1929-77-7	Vernolate	240	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	750	ug/kg	UJ
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	15972-60-8	Alachlor	450	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	250	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	314-40-9	Bromacil	500	ug/kg	UJ
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	23184-66-9	Butachlor	750	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	2008-41-5	Butylate	250	ug/kg	UJ
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	2425-06-1	Captafol	3000	ug/kg	UJ
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	500	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	100	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/kg	UJ
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	1134-23-2	Dacloate	250	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	1897456	Daconil			R
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	62	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	2303-16-4	Diallate-II	870	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	333-41-5	Diazinon	100	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	250	ug/kg	UJ
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	60-57-1	Dieldrin	12	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	957-51-7	Diphenamid	370	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	330-54-1	Diuron	750	ug/kg	UJ
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	759-94-4	Eptam	250	ug/kg	UJ
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	190	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	563-12-2	Ethion	87	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	13194-48-4	Ethoprop	100	ug/kg	UJ
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	60168-88-9	Fenarimol	370	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	87	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	250	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	944-22-9	Fonophos	75	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	961-11-5	Gardona	250	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	115322	Kelthane			R
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	121-75-5	Malathion	100	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	150505	Merphos			R
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	750	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	51218-45-2	Metholachlor	500	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	100	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	113-48-4	MGK-264	1000	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	2212-67-1	Molinate	250	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	15299-99-7	Napropamide	370	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	500	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	56-38-2	Parathion	100	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	100	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	1114-71-2	Pebulate	250	ug/kg	UJ
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	26399-36-0	Profluralin	300	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	500	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	300	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	2312-35-8	Propargite	250	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	31218-83-4	Propetamphos	250	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	299-84-3	Ronnel	87	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	3689-24-5	Sulfotep	75	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	5902-51-2	Terbacil	370	ug/kg	UJ
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	2303-17-5	Triallate	370	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/kg	U
97080824	2/19/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	E	26	5		N	3.2	EPA 8085	AED-Pest	1929-77-7	Vernolate	250	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	730	ug/kg	UJ
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	15972-60-8	Alachlor	440	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	314-40-9	Bromacil	490	ug/kg	UJ
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	23184-66-9	Butachlor	730	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/kg	UJ
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	2425-06-1	Captafol	2900	ug/kg	UJ
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	490	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	98	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/kg	UJ
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	1897456	Daconil			R
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	61	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	2303-16-4	Diallate-II	850	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	333-41-5	Diazinon	98	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/kg	UJ
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	60-57-1	Dieldrin	12	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	957-51-7	Diphenamid	370	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	330-54-1	Diuron	730	ug/kg	UJ
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/kg	UJ
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	563-12-2	Ethion	85	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	98	ug/kg	UJ
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	370	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	85	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	944-22-9	Fonophos	73	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/kg	UJ
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	115322	Kelthane			R
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	121-75-5	Malathion	98	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	150505	Merphos			R
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	730	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	490	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	98	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	113-48-4	MGK-264	980	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	15299-99-7	Napropamide	370	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	490	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	56-38-2	Parathion	98	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	98	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/kg	UJ
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	26399-36-0	Profluralin	290	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	490	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	290	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	299-84-3	Ronnel	85	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	73	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	5902-51-2	Terbacil	370	ug/kg	UJ
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	2303-17-5	Triallate	370	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/kg	U
97080825	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	C	26	5		N	3.5	EPA 8085	AED-Pest	1929-77-7	Vernolate	240	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	730	ug/kg	UJ
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	15972-60-8	Alachlor	440	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	314-40-9	Bromacil	490	ug/kg	UJ
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	23184-66-9	Butachlor	730	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/kg	UJ
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	2425-06-1	Captafol	2900	ug/kg	UJ
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	490	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	98	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/kg	UJ
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	1897456	Daconil			R
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	61	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	2303-16-4	Diallate-II	860	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	333-41-5	Diazinon	98	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/kg	UJ
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	62737	Dichlorvos			R
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	60-57-1	Dieldrin	12	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	957-51-7	Diphenamid	370	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	330-54-1	Diuron	730	ug/kg	UJ
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/kg	UJ
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	563-12-2	Ethion	86	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	13194-48-4	Ethoprop	98	ug/kg	UJ
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	60168-88-9	Fenarimol	370	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	86	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	944-22-9	Fonophos	73	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/kg	UJ
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	115322	Kelthane			R
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	121-75-5	Malathion	98	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	150505	Merphos			R
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	730	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	51218-45-2	Metholachlor	490	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	98	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	113-48-4	MGK-264	980	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	15299-99-7	Napropamide	370	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	490	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	56-38-2	Parathion	98	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	98	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/kg	UJ
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	26399-36-0	Profluralin	290	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	490	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	290	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	299-84-3	Ronnel	86	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	3689-24-5	Sulfotep	73	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	5902-51-2	Terbacil	370	ug/kg	UJ
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	43121-43-3	Triadefon	320	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	2303-17-5	Triallate	370	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/kg	U
97080990	2/20/1997	Largescale Sucker	FS	Deschutes River	Columbia River	98	A	26	5		N	4.4	EPA 8085	AED-Pest	1929-77-7	Vernolate	240	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	790	ug/kg	UJ

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	15972-60-8	Alachlor	470	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	834-12-8	Ametryn	130	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	1610-17-9	Atraton	200	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	1912-24-9	Atrazine	130	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	210	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	210	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	1861-40-1	Benefin	200	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	260	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	314-40-9	Bromacil	530	ug/kg	UJ
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	23184-66-9	Butachlor	790	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	2008-41-5	Butylate	260	ug/kg	UJ
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	2425-06-1	Captafol	3200	ug/kg	UJ
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	133-06-2	Captan	180	ug/kg	UJ
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1300	ug/kg	UJ
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	530	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	110	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	260	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	56-72-4	Coumaphos	160	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	21725-46-2	Cyanazine	200	ug/kg	UJ
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	1134-23-2	Cycloate	260	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	1897456	Daconil			R
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	66	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	78-48-8	DEF	180	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	2303-16-4	Diallate-II	920	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	333-41-5	Diazinon	110	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	260	ug/kg	UJ
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	62737	Dichlorvos			R
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	60-57-1	Dieldrin	6.3	ug/kg	J
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	78-34-2	Dioxathion	220	ug/kg	UJ
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	957-51-7	Diphenamid	400	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	330-54-1	Diuron	790	ug/kg	UJ
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	959-98-8	Endosulfan I	13	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	13	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	72-20-8	Endrin	13	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	13	ug/kg	UJ
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	13	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	2104-64-5	EPN	130	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	759-94-4	Eptam	260	ug/kg	UJ
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	200	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	563-12-2	Ethion	92	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	13194-48-4	Ethoprop	110	ug/kg	UJ
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	60168-88-9	Fenarimol	400	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	92	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	260	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	944-22-9	Fonophos	79	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	961-11-5	Gardona	260	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	115322	Kelthane			R
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	121-75-5	Malathion	110	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	150505	Merphos			R
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	790	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	51218-45-2	Metholachlor	530	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	72-43-5	Methoxychlor	13	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	110	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	21087-64-9	Metribuzin	130	ug/kg	UJ
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	113-48-4	MGK-264	1100	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	2212-67-1	Molinate	260	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	15299-99-7	Napromamide	400	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	530	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	56-38-2	Parathion	110	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	110	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	1114-71-2	Pebulate	260	ug/kg	UJ
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	200	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	26399-36-0	Profluralin	320	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	7287-19-6	Prometryne	130	ug/kg	UJ
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	530	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	320	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	2312-35-8	Propargite	260	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	139-40-2	Propazine	130	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	31218-83-4	Propetamphos	260	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	299-84-3	Ronnel	92	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	122-34-9	Simazine	130	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	3689-24-5	Sulfotep	79	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	5902-51-2	Terbacil	400	ug/kg	UJ
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	130	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	43121-43-3	Triademefon	340	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	2303-17-5	Triallate	400	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	1582-09-8	Trifluralin	200	ug/kg	U
97090980	2/20/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	N	4.4	EPA 8085	AED-Pest	1929-77-7	Vernolate	260	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	770	ug/kg	UJ
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	15972-60-8	Alachlor	460	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	834-12-8	Ametryn	130	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1912-24-9	Atrazine	130	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	260	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	314-40-9	Bromacil	510	ug/kg	UJ
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	23184-66-9	Butachlor	770	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	2008-41-5	Butylate	260	ug/kg	UJ
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	2425-06-1	Captafol	3100	ug/kg	UJ
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	133-06-2	Captan	180	ug/kg	UJ
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1300	ug/kg	UJ
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	510	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	100	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	260	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/kg	UJ
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1134-23-2	Dacloate	260	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1897456	Daconil			R
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	64	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	78-48-8	DEF	180	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	2303-16-4	Diallate-II	890	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	333-41-5	Diazinon	100	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	260	ug/kg	UJ
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	62737	Dichlorvos			R
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	60-57-1	Dieldrin	13	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	78-34-2	Dioxathion	220	ug/kg	UJ
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	957-51-7	Diphenamid	380	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	330-54-1	Diuron	770	ug/kg	UJ
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	959-98-8	Endosulfan I	13	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	13	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	72-20-8	Endrin	13	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	13	ug/kg	UJ
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	13	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	2104-64-5	EPN	130	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	759-94-4	Eptam	260	ug/kg	UJ
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	190	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	563-12-2	Ethion	89	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	13194-48-4	Ethoprop	100	ug/kg	UJ
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	60168-88-9	Fenarimol	380	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	89	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	260	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	944-22-9	Fonophos	77	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	961-11-5	Gardona	260	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	115322	Kelthane			R
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	121-75-5	Malathion	100	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	150505	Merphos			R
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	57837-19-1	Metaxyl	770	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	51218-45-2	Metholachlor	510	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	72-43-5	Methoxychlor	13	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	100	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	21087-64-9	Metribuzin	130	ug/kg	UJ
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	113-48-4	MGK-264	1000	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	2212-67-1	Molinate	260	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	15299-99-7	Napropamide	380	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	510	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	56-38-2	Parathion	100	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	100	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1114-71-2	Pebulate	260	ug/kg	UJ
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	26399-36-0	Profluralin	310	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	7287-19-6	Prometryne	130	ug/kg	UJ
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	510	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	310	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	2312-35-8	Propargite	260	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	139-40-2	Propazine	130	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	31218-83-4	Propetamphos	260	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	299-84-3	Ronnel	89	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	122-34-9	Simazine	130	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	3689-24-5	Sulfotep	77	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	5902-51-2	Terbacil	380	ug/kg	UJ
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	130	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	43121-43-3	Triademefon	330	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	2303-17-5	Triallate	380	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/kg	U
97090981	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1929-77-7	Vernolate	260	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	720	ug/kg	UJ
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	15972-60-8	Alachlor	430	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	314-40-9	Bromacil	480	ug/kg	UJ
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	23184-66-9	Butachlor	720	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/kg	UJ
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	2425-06-1	Captafol	2900	ug/kg	UJ
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	480	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	96	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	56-72-4	Coumaphos	140	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/kg	UJ
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1897456	Daconil			R
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	60	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	2303-16-4	Diallate-II	840	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	333-41-5	Diazinon	96	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/kg	UJ
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	62737	Dichlorvos			R
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	60-57-1	Dieldrin	12	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	78-34-2	Dioxathion	200	ug/kg	UJ
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	957-51-7	Diphenamid	360	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	330-54-1	Diuron	720	ug/kg	UJ
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/kg	UJ
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	563-12-2	Ethion	84	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	13194-48-4	Ethoprop	96	ug/kg	UJ
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	60168-88-9	Fenarimol	360	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	84	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	944-22-9	Fonophos	72	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/kg	UJ
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	115322	Kelthane			R
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	121-75-5	Malathion	96	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	150505	Merphos			R
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	720	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	51218-45-2	Metholachlor	480	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	96	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	113-48-4	MGK-264	960	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	15299-99-7	Napropamide	360	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	480	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	56-38-2	Parathion	96	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	96	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/kg	UJ
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	26399-36-0	Profluralin	290	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	480	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	290	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	299-84-3	Ronnel	84	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	3689-24-5	Sulfotep	72	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	5902-51-2	Terbacil	360	ug/kg	UJ
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	43121-43-3	Triademefon	310	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	2303-17-5	Triallate	360	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/kg	U
97090982	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3		N	3.8	EPA 8085	AED-Pest	1929-77-7	Trifluralin	240	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	760	ug/kg	UJ
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	15972-60-8	Alachlor	450	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	834-12-8	Ametryn	130	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1912-24-9	Atrazine	130	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	250	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	314-40-9	Bromacil	500	ug/kg	UJ
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	23184-66-9	Butachlor	760	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	2008-41-5	Butylate	250	ug/kg	UJ
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	2425-06-1	Captafol	3000	ug/kg	UJ
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	133-06-2	Captan	180	ug/kg	UJ
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1300	ug/kg	UJ
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	500	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	100	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/kg	UJ
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1134-23-2	Cycloate	250	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1897456	Daconil			R
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	63	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	78-48-8	DEF	180	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	2303-16-4	Diallate-II	880	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	333-41-5	Diazinon	100	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	250	ug/kg	UJ
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	62737	Dichlorvos			R
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	60-57-1	Dieldrin	1.8	ug/kg	NJ
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	957-51-7	Diphenamid	380	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	330-54-1	Diuron	760	ug/kg	UJ
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	959-98-8	Endosulfan I	13	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	13	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	72-20-8	Endrin	13	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	13	ug/kg	UJ
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	13	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	2104-64-5	EPN	130	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	759-94-4	Eptam	250	ug/kg	UJ
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	190	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	563-12-2	Ethion	88	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	13194-48-4	Ethoprop	100	ug/kg	UJ
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	60168-88-9	Fenarimol	380	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	88	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	250	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	944-22-9	Fonophos	76	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	961-11-5	Gardona	250	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	115322	Kelthane			R

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	121-75-5	Malathion	100	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	150505	Merphos			R
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	760	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	51218-45-2	Metholachlor	500	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	72-43-5	Methoxychlor	13	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	100	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	21087-64-9	Metribuzin	130	ug/kg	UJ
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	113-48-4	MGK-264	1000	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	2212-67-1	Molinate	250	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	15299-99-7	Napropamide	380	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	500	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	56-38-2	Parathion	100	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	100	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1114-71-2	Pebulate	250	ug/kg	UJ
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	26399-36-0	Profluralin	300	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	7287-19-6	Prometryne	130	ug/kg	UJ
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	500	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	300	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	2312-35-8	Propargite	250	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	139-40-2	Propazine	130	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	31218-83-4	Propetamphos	250	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	299-84-3	Ronnel	88	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	122-34-9	Simazine	130	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	3689-24-5	Sulfotep	76	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	5902-51-2	Terbacil	380	ug/kg	UJ
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	130	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	43121-43-3	Triademefon	330	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	2303-17-5	Triallate	380	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/kg	U
97090983	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1929-77-7	Vernolate	250	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	730	ug/kg	UJ
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	15972-60-8	Alachlor	440	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	190	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	190	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	240	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	314-40-9	Bromacil	490	ug/kg	UJ
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	23184-66-9	Butachlor	730	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	2008-41-5	Butylate	240	ug/kg	UJ
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	2425-06-1	Captafol	2900	ug/kg	UJ
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	490	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	97	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	240	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/kg	UJ
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	1134-23-2	Cycloate	240	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	1897456	Daconil			R
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	61	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	2303-16-4	Diallate-II	850	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	333-41-5	Diazinon	97	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	240	ug/kg	UJ
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	62737	Dichlorvos			R
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	60-57-1	Dieldrin	2	ug/kg	NJ
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	957-51-7	Diphenamid	360	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	330-54-1	Diuron	730	ug/kg	UJ
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	759-94-4	Eptam	240	ug/kg	UJ
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	563-12-2	Ethion	85	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	13194-48-4	Ethoprop	97	ug/kg	UJ
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	60168-88-9	Fenarimol	360	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	85	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	240	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	944-22-9	Fonophos	73	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	961-11-5	Gardona	240	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/kg	UJ
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	115322	Kelthane			R
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	121-75-5	Malathion	97	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	150505	Merphos			R
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	730	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	51218-45-2	Metholachlor	490	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	97	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	113-48-4	MGK-264	970	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	2212-67-1	Molinate	240	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	15299-99-7	Napropamide	360	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	490	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	56-38-2	Parathion	97	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	97	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	1114-71-2	Pebulate	240	ug/kg	UJ
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	26399-36-0	Profluralin	290	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	490	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	290	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	2312-35-8	Propargite	240	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	31218-83-4	Propetamphos	240	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	299-84-3	Ronnel	85	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	3689-24-5	Sulfotep	73	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	5902-51-2	Terbacil	360	ug/kg	UJ
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	2303-17-5	Triallate	360	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/kg	U
97090984	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.9	EPA 8085	AED-Pest	1929-77-7	Vernolate	240	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	780	ug/kg	UJ
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	15972-60-8	Alachlor	470	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	834-12-8	Ametryn	130	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1912-24-9	Atrazine	130	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	210	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	210	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	260	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	314-40-9	Bromacil	520	ug/kg	UJ
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	23184-66-9	Butachlor	780	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	2008-41-5	Butylate	260	ug/kg	UJ
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	2425-06-1	Captafol	3100	ug/kg	UJ
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	133-06-2	Captan	180	ug/kg	UJ
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1300	ug/kg	UJ
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	520	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	100	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	260	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	56-72-4	Coumaphos	160	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/kg	UJ
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1134-23-2	Cycloate	260	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1897456	Daconil			R
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	65	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	78-48-8	DEF	180	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	2303-16-4	Diallate-II	900	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	333-41-5	Diazinon	100	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	260	ug/kg	UJ
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	62737	Dichlorvos			R
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	60-57-1	Dieldrin	13	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	78-34-2	Dioxathion	220	ug/kg	UJ
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	957-51-7	Diphenamid	390	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	330-54-1	Diuron	780	ug/kg	UJ
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	959-98-8	Endosulfan I	13	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	13	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	72-20-8	Endrin	13	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	13	ug/kg	UJ
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	13	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	2104-64-5	EPN	130	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	759-94-4	Eptam	260	ug/kg	UJ
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	190	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	563-12-2	Ethion	90	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	13194-48-4	Ethoprop	100	ug/kg	UJ
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	60168-88-9	Fenarimol	390	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	90	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	260	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	944-22-9	Fonophos	78	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	961-11-5	Gardona	260	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	115322	Kelthane			R
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	121-75-5	Malathion	100	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	150505	Merphos			R
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	780	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	51218-45-2	Metholachlor	520	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	72-43-5	Methoxychlor	13	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	100	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	21087-64-9	Metribuzin	130	ug/kg	UJ
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	113-48-4	MGK-264	1000	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	2212-67-1	Molinate	260	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	15299-99-7	Napropamide	390	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	520	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	56-38-2	Parathion	100	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	100	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1114-71-2	Pebulate	260	ug/kg	UJ
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	26399-36-0	Profluralin	310	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	7287-19-6	Prometryne	130	ug/kg	UJ
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	520	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	310	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	2312-35-8	Propargite	260	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	139-40-2	Propazine	130	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	31218-83-4	Propetamphos	260	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	299-84-3	Ronnel	90	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	122-34-9	Simazine	130	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	3689-24-5	Sulfotep	78	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	5902-51-2	Terbacil	390	ug/kg	UJ
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	130	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	43121-43-3	Triademefon	340	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	2303-17-5	Triallate	390	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/kg	U
97090985	2/25/1997	Steelhead	WB	Clearwater River	Snake River	96		28	3		N	5.7	EPA 8085	AED-Pest	1929-77-7	Vernolate	260	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	770	ug/kg	UJ
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	15972-60-8	Alachlor	460	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	834-12-8	Ametryn	130	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	1912-24-9	Atrazine	130	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	210	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	210	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	260	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	314-40-9	Bromacil	520	ug/kg	UJ
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	23184-66-9	Butachlor	770	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	2008-41-5	Butylate	260	ug/kg	UJ
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	2425-06-1	Captafol	3100	ug/kg	UJ
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	133-06-2	Captan	180	ug/kg	UJ
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1300	ug/kg	UJ
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	520	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	100	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	260	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/kg	UJ
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	1134-23-2	Dacloate	260	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	1897456	Daconil			R
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	64	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	78-48-8	DEF	180	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	2303-16-4	Diallate-II	900	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	333-41-5	Diazinon	100	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	260	ug/kg	UJ
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	62737	Dichlorvos			R
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	60-57-1	Dieldrin	5.4	ug/kg	NJ
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	78-34-2	Dioxathion	220	ug/kg	UJ
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	957-51-7	Diphenamid	390	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	330-54-1	Diuron	770	ug/kg	UJ
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	13	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	13	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	72-20-8	Endrin	13	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	13	ug/kg	UJ
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	13	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	2104-64-5	EPN	130	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	759-94-4	Eptam	260	ug/kg	UJ
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	190	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	563-12-2	Ethion	90	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	100	ug/kg	UJ
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	390	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	90	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	260	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	944-22-9	Fonophos	77	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	961-11-5	Gardona	260	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	115322	Kelthane			R
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	121-75-5	Malathion	100	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	150505	Merphos			R
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	770	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	520	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	13	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	100	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	130	ug/kg	UJ
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	113-48-4	MGK-264	1000	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	2212-67-1	Molinate	260	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	15299-99-7	Napropamide	390	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	520	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	56-38-2	Parathion	100	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	100	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	1114-71-2	Pebulate	260	ug/kg	UJ
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	26399-36-0	Profluralin	310	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	7287-19-6	Prometryne	130	ug/kg	UJ
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	520	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	310	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	2312-35-8	Propargite	260	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	139-40-2	Propazine	130	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	260	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	299-84-3	Ronnel	90	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	122-34-9	Simazine	130	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	77	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	5902-51-2	Terbacil	390	ug/kg	UJ
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	130	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	43121-43-3	Triademefon	340	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	2303-17-5	Triallate	390	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/kg	U
97090986	2/25/1997	Steelhead	FS	Clearwater River	Snake River	96		27	3	3	D	5	EPA 8085	AED-Pest	1929-77-7	Vernolate	260	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	760	ug/kg	UJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	15972-60-8	Alachlor	450	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	834-12-8	Ametryn	130	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	1912-24-9	Atrazine	130	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	250	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	314-40-9	Bromacil	500	ug/kg	UJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	23184-66-9	Butachlor	760	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	2008-41-5	Butylate	250	ug/kg	UJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	2425-06-1	Captafol	3000	ug/kg	UJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	133-06-2	Captan	180	ug/kg	UJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1300	ug/kg	UJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	500	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	100	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/kg	UJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	1134-23-2	Cycloate	250	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	1897456	Daconil			R
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	63	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	78-48-8	DEF	180	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	2303-16-4	Diallate-II	880	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	333-41-5	Diazinon	100	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	250	ug/kg	UJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	62737	Dichlorvos			R
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	60-57-1	Dieldrin	4.3	ug/kg	NJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	957-51-7	Diphenamid	380	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	330-54-1	Diuron	760	ug/kg	UJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	959-98-8	Endosulfan I	13	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	13	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	72-20-8	Endrin	13	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	13	ug/kg	UJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	13	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	2104-64-5	EPN	130	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	759-94-4	Eptam	250	ug/kg	UJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	190	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	563-12-2	Ethion	88	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	13194-48-4	Ethoprop	100	ug/kg	UJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	60168-88-9	Fenarimol	380	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	88	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	250	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	944-22-9	Fonophos	76	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	961-11-5	Gardona	250	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	10	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	115322	Kelthane			R
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	121-75-5	Malathion	100	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	150505	Merphos			R
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	760	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	51218-45-2	Metholachlor	500	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	72-43-5	Methoxychlor	13	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	100	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	21087-64-9	Metribuzin	130	ug/kg	UJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	113-48-4	MGK-264	1000	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	2212-67-1	Molinate	250	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	15299-99-7	Napropamide	380	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	500	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	56-38-2	Parathion	100	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	100	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	1114-71-2	Pebulate	250	ug/kg	UJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	4.4	ug/kg	NJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	26399-36-0	Profluralin	300	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	7287-19-6	Prometryne	130	ug/kg	UJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	500	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	300	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	2312-35-8	Propargite	250	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	139-40-2	Propazine	130	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	31218-83-4	Propetamphos	250	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	299-84-3	Ronnel	88	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	122-34-9	Simazine	130	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	3689-24-5	Sulfotep	76	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	5902-51-2	Terbacil	380	ug/kg	UJ
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	130	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	12	ug/kg	J
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	43121-43-3	Triademefon	330	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	2303-17-5	Triallate	380	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/kg	U
97130800	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.1	EPA 8085	AED-Pest	1929-77-7	Vernolate	250	ug/kg	U
97130801	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	B	29	1		N	7.1	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	1.3	ug/kg	NJ
97130801	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	B	29	1		N	7.1	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	4.2	ug/kg	J
97130801	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	B	29	1		N	7.1	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	36	ug/kg	J
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	740	ug/kg	UJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	15972-60-8	Alachlor	440	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	250	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	314-40-9	Bromacil	490	ug/kg	UJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	23184-66-9	Butachlor	740	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	2008-41-5	Butylate	250	ug/kg	UJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	2425-06-1	Captafol	3000	ug/kg	UJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	490	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	99	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/kg	UJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	1134-23-2	Dacloate	250	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	1897456	Daconil			R
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	62	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	2303-16-4	Diallate-II	860	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	333-41-5	Diazinon	99	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	250	ug/kg	UJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	62737	Dichlorvos			R
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	60-57-1	Dieldrin	4.4	ug/kg	NJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	957-51-7	Diphenamid	370	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	330-54-1	Diuron	740	ug/kg	UJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	759-94-4	Eptam	250	ug/kg	UJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	563-12-2	Ethion	86	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	13194-48-4	Ethoprop	99	ug/kg	UJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	60168-88-9	Fenarimol	370	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	86	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	250	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	944-22-9	Fonophos	74	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	961-11-5	Gardona	250	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	3.7	ug/kg	NJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	115322	Kelthane			R
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	121-75-5	Malathion	99	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	150505	Merphos			R
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	740	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	51218-45-2	Metholachlor	490	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	99	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	113-48-4	MGK-264	990	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	2212-67-1	Molinate	250	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	15299-99-7	Napropamide	370	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	490	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	56-38-2	Parathion	99	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	99	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	1114-71-2	Pebulate	250	ug/kg	UJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	5.3	ug/kg	J
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	26399-36-0	Profluralin	300	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	490	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	300	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	2312-35-8	Propargite	250	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	31218-83-4	Propetamphos	250	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	299-84-3	Ronnel	86	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	3689-24-5	Sulfotep	74	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	5902-51-2	Terbacil	370	ug/kg	UJ
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	28	ug/kg	J
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	2303-17-5	Triallate	370	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/kg	U
97130802	3/21/1997	White Sturgeon	WB	Columbia River	Pacific Ocean	8	E	29	1		N	7.7	EPA 8085	AED-Pest	1929-77-7	Vernolate	250	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	750	ug/kg	UJ
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	15972-60-8	Alachlor	450	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	250	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	314-40-9	Bromacil	500	ug/kg	UJ
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	23184-66-9	Butachlor	750	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	2008-41-5	Butylate	250	ug/kg	UJ
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	2425-06-1	Captafol	3000	ug/kg	UJ
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	500	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	100	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/kg	UJ
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	1134-23-2	Cycloate	250	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	1897456	Daconil			R
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	62	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	2303-16-4	Diallate-II	870	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	333-41-5	Diazinon	100	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	250	ug/kg	UJ
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	62737	Dichlorvos			R
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	60-57-1	Dieldrin	5.2	ug/kg	J
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	957-51-7	Diphenamid	370	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	330-54-1	Diuron	750	ug/kg	UJ
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	759-94-4	Eptam	250	ug/kg	UJ
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	190	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	563-12-2	Ethion	87	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	100	ug/kg	UJ
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	370	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	87	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	250	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	944-22-9	Fonophos	75	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	961-11-5	Gardona	250	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	10	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	115322	Kelthane			R
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	121-75-5	Malathion	100	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	150505	Merphos			R
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	750	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	500	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	100	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	113-48-4	MGK-264	1000	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	2212-67-1	Molinate	250	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	15299-99-7	Napropamide	370	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	500	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	56-38-2	Parathion	100	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	100	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	1114-71-2	Pebulate	250	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	10	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	26399-36-0	Profluralin	300	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	500	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	300	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	2312-35-8	Propargite	250	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	250	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	299-84-3	Ronnel	87	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	75	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	5902-51-2	Terbacil	370	ug/kg	UJ
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	8.9	ug/kg	J
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	2303-17-5	Triallate	370	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/kg	U
97140800	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	N	6.5	EPA 8085	AED-Pest	1929-77-7	Vernolate	250	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	740	ug/kg	UJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	15972-60-8	Alachlor	440	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	250	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	314-40-9	Bromacil	490	ug/kg	UJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	23184-66-9	Butachlor	740	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	2008-41-5	Butylate	250	ug/kg	UJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	2425-06-1	Captafol	3000	ug/kg	UJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	490	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	99	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/kg	UJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	1134-23-2	Cycloate	250	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	1897456	Daconil			R
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	62	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	2303-16-4	Diallate-II	860	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	333-41-5	Diazinon	99	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	250	ug/kg	UJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	62737	Dichlorvos			R
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	60-57-1	Dieldrin	5.2	ug/kg	NJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	957-51-7	Diphenamid	370	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	330-54-1	Diuron	740	ug/kg	UJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	759-94-4	Eptam	250	ug/kg	UJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	190	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	563-12-2	Ethion	86	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	13194-48-4	Ethoprop	99	ug/kg	UJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	60168-88-9	Fenarimol	370	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	86	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	250	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	944-22-9	Fonophos	74	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	961-11-5	Gardona	250	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	2.3	ug/kg	NJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	115322	Kelthane			R
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	121-75-5	Malathion	99	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	150505	Merphos			R
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	740	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	51218-45-2	Metholachlor	490	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	99	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	113-48-4	MGK-264	990	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	2212-67-1	Molinate	250	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	15299-99-7	Napropamide	370	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	490	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	56-38-2	Parathion	99	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	99	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	1114-71-2	Pebulate	250	ug/kg	UJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	2.5	ug/kg	NJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	26399-36-0	Profluralin	300	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	490	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	300	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	2312-35-8	Propargite	250	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	31218-83-4	Propetamphos	250	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	299-84-3	Ronnel	86	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	3689-24-5	Sulfotep	74	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	5902-51-2	Terbacil	370	ug/kg	UJ
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	9.4	ug/kg	J
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	2303-17-5	Triallate	370	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/kg	U
97140801	4/2/1997	White Sturgeon	FW	Snake River	Columbia River	13	E	30	1	4	D	6.2	EPA 8085	AED-Pest	1929-77-7	Vernolate	250	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	750	ug/kg	UJ
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	15972-60-8	Alachlor	450	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	834-12-8	Ametryn	130	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1912-24-9	Atrazine	130	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	250	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	314-40-9	Bromacil	500	ug/kg	UJ
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	23184-66-9	Butachlor	750	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	2008-41-5	Butylate	250	ug/kg	UJ
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	2425-06-1	Captafol	3000	ug/kg	UJ
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	133-06-2	Captan	180	ug/kg	UJ
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1300	ug/kg	UJ
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	500	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	100	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/kg	UJ
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1134-23-2	Cycloate	250	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1897456	Daconil			R
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	63	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	78-48-8	DEF	180	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	2303-16-4	Diallate-II	880	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	333-41-5	Diazinon	100	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	250	ug/kg	UJ
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	62737	Dichlorvos			R
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	60-57-1	Dieldrin	6.8	ug/kg	NJ
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	957-51-7	Diphenamid	380	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	330-54-1	Diuron	750	ug/kg	UJ
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	13	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	13	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	72-20-8	Endrin	13	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	13	ug/kg	UJ
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	13	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	2104-64-5	EPN	130	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	759-94-4	Eptam	250	ug/kg	UJ
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	190	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	563-12-2	Ethion	88	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	100	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	380	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	88	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	250	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	944-22-9	Fonophos	75	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	961-11-5	Gardona	250	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	115322	Kelthane			R
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	121-75-5	Malathion	100	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	150505	Merphos			R
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	750	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	500	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	13	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	100	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	130	ug/kg	UJ
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	113-48-4	MGK-264	1000	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	2212-67-1	Molinate	250	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	15299-99-7	Napropamide	380	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	500	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	56-38-2	Parathion	100	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	100	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1114-71-2	Pebulate	250	ug/kg	UJ
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	26399-36-0	Profluralin	300	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	7287-19-6	Prometryne	130	ug/kg	UJ
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	500	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	300	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	2312-35-8	Propargite	250	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	139-40-2	Propazine	130	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	250	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	299-84-3	Ronnel	88	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	122-34-9	Simazine	130	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	75	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	5902-51-2	Terbacil	380	ug/kg	UJ
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	130	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	43121-43-3	Triademefon	330	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	2303-17-5	Triallate	380	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/kg	U
97140810	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1929-77-7	Veronolate	250	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	750	ug/kg	UJ
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	15972-60-8	Alachlor	450	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1610-17-9	Atraton	190	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1861-40-1	Benefin	190	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	250	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	314-40-9	Bromacil	500	ug/kg	UJ
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	23184-66-9	Butachlor	750	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	2008-41-5	Butylate	250	ug/kg	UJ
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	2425-06-1	Captafol	3000	ug/kg	UJ
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	500	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	100	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	190	ug/kg	UJ
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1134-23-2	Cycloate	250	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1897456	Daconil			R
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	62	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	2303-16-4	Diallate-II	870	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	333-41-5	Diazinon	100	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	250	ug/kg	UJ
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	62737	Dichlorvos			R
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	60-57-1	Dieldrin	12	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	957-51-7	Diphenamid	370	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	330-54-1	Diuron	750	ug/kg	UJ
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	759-94-4	Eptam	250	ug/kg	UJ
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	55283-68-6	Ethalffluralin (Sonalan)	190	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	563-12-2	Ethion	87	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	100	ug/kg	UJ
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	370	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	87	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	250	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	944-22-9	Fonophos	75	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	961-11-5	Gardona	250	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	115322	Kelthane			R
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	121-75-5	Malathion	100	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	150505	Merphos			R
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	750	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	500	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	100	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	113-48-4	MKG-264	1000	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	2212-67-1	Molinate	250	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	15299-99-7	Napropamide	370	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	500	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	56-38-2	Parathion	100	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	100	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1114-71-2	Pebulate	250	ug/kg	UJ
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	190	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	26399-36-0	Profluralin	300	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	500	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	300	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	2312-35-8	Propargite	250	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	250	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	299-84-3	Ronnel	87	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	75	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	5902-51-2	Terbacil	370	ug/kg	UJ
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	2303-17-5	Triallate	370	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	190	ug/kg	U
97140811	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	5.5	EPA 8085	AED-Pest	1929-77-7	Vernolate	250	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	740	ug/kg	UJ
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	15972-60-8	Alachlor	440	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	834-12-8	Ametryn	120	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	1610-17-9	Atraton	180	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	1912-24-9	Atrazine	120	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	200	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	200	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	1861-40-1	Benefin	180	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	250	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	314-40-9	Bromacil	490	ug/kg	UJ
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	23184-66-9	Butachlor	740	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	2008-41-5	Butylate	250	ug/kg	UJ
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	2425-06-1	Captafol	3000	ug/kg	UJ
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	133-06-2	Captan	170	ug/kg	UJ
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	786-19-6	Carbophenothion	1200	ug/kg	UJ
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	490	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	98	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	250	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	56-72-4	Coumaphos	150	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	21725-46-2	Cyanazine	180	ug/kg	UJ
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	1134-23-2	Cycloate	250	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	1897456	Daconil			R
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	2136-79-0	Dacthal-DCPA	62	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	78-48-8	DEF	170	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	2303-16-4	Diallate-II	860	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	333-41-5	Diazinon	98	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	250	ug/kg	UJ
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	62737	Dichlorvos			R
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	60-57-1	Dieldrin	5.9	ug/kg	NJ
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	78-34-2	Dioxathion	210	ug/kg	UJ
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	957-51-7	Diphenamid	370	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	330-54-1	Diuron	740	ug/kg	UJ
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	959-98-8	Endosulfan I	12	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	12	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	72-20-8	Endrin	12	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	12	ug/kg	UJ
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	12	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	2104-64-5	EPN	120	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	759-94-4	Eptam	250	ug/kg	UJ
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	180	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	563-12-2	Ethion	86	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	13194-48-4	Ethoprop	98	ug/kg	UJ
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	60168-88-9	Fenarimol	370	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	86	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	250	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	944-22-9	Fonophos	74	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	961-11-5	Gardona	250	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	732-11-6	Imidan	140	ug/kg	UJ
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	115322	Kelthane			R
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	121-75-5	Malathion	98	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	150505	Merphos			R
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	57837-19-1	Metalaxyl	740	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	51218-45-2	Metholachlor	490	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	72-43-5	Methoxychlor	12	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	98	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	21087-64-9	Metribuzin	120	ug/kg	UJ
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	113-48-4	MGK-264	980	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	2212-67-1	Molinate	250	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	15299-99-7	Napropamide	370	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	490	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	56-38-2	Parathion	98	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	98	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	1114-71-2	Pebulate	250	ug/kg	UJ
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	180	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	26399-36-0	Profluralin	300	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	7287-19-6	Prometryne	120	ug/kg	UJ
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	490	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	300	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	2312-35-8	Propargite	250	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	139-40-2	Propazine	120	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	31218-83-4	Propetamphos	250	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	299-84-3	Ronnel	86	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	122-34-9	Simazine	120	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	3689-24-5	Sulfotep	74	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	5902-51-2	Terbacil	370	ug/kg	UJ
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	120	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	43121-43-3	Triademefon	320	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	2303-17-5	Triallate	370	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	1582-09-8	Trifluralin	180	ug/kg	U
97140812	4/3/1997	Steelhead	WB	Snake River	Columbia River	93	A	31	5		N	3.7	EPA 8085	AED-Pest	1929-77-7	Vernolate	250	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	580	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	15972-60-8	Alachlor	350	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	834-12-8	Ametryn	97	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	1610-17-9	Atraton			R
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	1912-24-9	Atrazine	97	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	314-40-9	Bromacil	390	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	23184-66-9	Butachlor	580	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	786-19-6	Carbophenothion	97	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	390	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	78	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	390	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	39	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	2303-16-4	Diallate-II	680	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	333-41-5	Diazinon	78	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	62-73-7	Dichlorvos	78	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	60-57-1	Dieldrin	39	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	957-51-7	Diphenamid	290	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	959-98-8	Endosulfan I	39	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	39	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	39	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	72-20-8	Endrin	39	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	39	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	39	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	2104-64-5	EPN	97	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	563-12-2	Ethion	68	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	13194-48-4	Ethoprop	78	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	97	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	60168-88-9	Fenarimol	290	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	68	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	55-38-9	Fenthion	68	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	390	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	944-22-9	Fonophos	58	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	121-75-5	Malathion	78	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	51218-45-2	Metholachlor	390	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	72-43-5	Methoxychlor	39	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	78	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	21087-64-9	Metribuzin	97	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	113-48-4	MGK-264	780	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	15299-99-7	Napropamide	290	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	390	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	56-38-2	Parathion	78	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	78	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	298-02-2	Phorate	68	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	1610-18-0	Prometon	97	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	7287-19-6	Prometryne	97	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	390	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	139-40-2	Propazine	97	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	299-84-3	Ronnel	68	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	122-34-9	Simazine	97	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	3689-24-5	Sulfotep	58	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	35400-43-2	Sulprofos	68	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	5902-51-2	Terbacil	290	ug/kg	UJ
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	97	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	2303-17-5	Triallate	290	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
97420932	#####	Coho	WB	Umatilla River	Columbia River	30		73	4		N	4.9	EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
97470990	#####	Mountain Whitefish	WB	Columbia River	Pacific Ocean	9	Q	78	35	r1	N	8.1	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	5.1	ug/kg	J
97470990	#####	Mountain Whitefish	WB	Columbia River	Pacific Ocean	9	Q	78	35	r1	N	8.1	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	29	ug/kg	J
97470990	#####	Mountain Whitefish	WB	Columbia River	Pacific Ocean	9	Q	78	35	r1	N	8.1	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	26	ug/kg	J
97470991	#####	Mountain Whitefish	WB	Columbia River	Pacific Ocean	9	Q	78	35		N	9.5	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	6.3	ug/kg	J
97470991	#####	Mountain Whitefish	WB	Columbia River	Pacific Ocean	9	Q	78	35		N	9.5	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	21	ug/kg	J
97470991	#####	Mountain Whitefish	WB	Columbia River	Pacific Ocean	9	Q	78	35		N	9.5	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	18	ug/kg	J
97470992	#####	Mountain Whitefish	WB	Columbia River	Pacific Ocean	9	P	78	35		N	8.1	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	6.2	ug/kg	J
97470992	#####	Mountain Whitefish	WB	Columbia River	Pacific Ocean	9	P	78	35		N	8.1	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	26	ug/kg	J
97470992	#####	Mountain Whitefish	WB	Columbia River	Pacific Ocean	9	P	78	35		N	8.1	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	21	ug/kg	J
97470993	#####	Mountain Whitefish	FS	Columbia River	Pacific Ocean	9	O	79	35		N	6.9	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	4.9	ug/kg	J
97470993	#####	Mountain Whitefish	FS	Columbia River	Pacific Ocean	9	O	79	35		N	6.9	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	24	ug/kg	J
97470993	#####	Mountain Whitefish	FS	Columbia River	Pacific Ocean	9	O	79	35		N	6.9	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	23	ug/kg	J
97470994	#####	Mountain Whitefish	FS	Columbia River	Pacific Ocean	9	O	79	35		N	7.7	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	7.4	ug/kg	J
97470994	#####	Mountain Whitefish	FS	Columbia River	Pacific Ocean	9	O	79	35		N	7.7	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	29	ug/kg	J
97470994	#####	Mountain Whitefish	FS	Columbia River	Pacific Ocean	9	O	79	35		N	7.7	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	26	ug/kg	J
97470995	#####	Mountain Whitefish	FS	Columbia River	Pacific Ocean	9	N	79	35		N	7.4	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	7.9	ug/kg	J
97470995	#####	Mountain Whitefish	FS	Columbia River	Pacific Ocean	9	N	79	35		N	7.4	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	33	ug/kg	J
97470995	#####	Mountain Whitefish	FS	Columbia River	Pacific Ocean	9	N	79	35		N	7.4	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	29	ug/kg	J
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	560	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	15972-60-8	Alachlor	340	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	834-12-8	Ametryn	94	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	1610-17-9	Atraton			R
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	1912-24-9	Atrazine	94	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	314-40-9	Bromacil	380	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	23184-66-9	Butachlor	560	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	2425-06-1	Captafol	240	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	786-19-6	Carbophenothion	94	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	380	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	75	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	380	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	56-72-4	Coumaphos	110	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	38	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	78-48-8	DEF	110	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	2303-16-4	Diallate-II	660	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	333-41-5	Diazinon	75	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	120-36-5	Dichlorprop	100	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	62-73-7	Dichlorvos	75	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	60-57-1	Dieldrin	38	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	957-51-7	Diphenamid	280	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	959-98-8	Endosulfan I	38	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	38	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	38	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	72-20-8	Endrin	38	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	38	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	38	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	2104-64-5	EPN	94	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	563-12-2	Ethion	66	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	13194-48-4	Ethoprop	75	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	94	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	60168-88-9	Fenarimol	280	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	66	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	55-38-9	Fenthion	66	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	380	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	944-22-9	Fonophos	56	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.4	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	732-11-6	Imidan	100	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	121-75-5	Malathion	75	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	150-50-5	Merphos	110	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	51218-45-2	Metholachlor	380	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	72-43-5	Methoxychlor	38	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	75	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	21087-64-9	Metribuzin	94	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	113-48-4	MKG-264	750	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	15299-99-7	Napropamide	280	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	380	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	56-38-2	Parathion	75	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	75	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	23	ug/kg	J
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	298-02-2	Phorate	66	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	1610-18-0	Prometon	94	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	7287-19-6	Prometryne	94	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	380	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	139-40-2	Propazine	94	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	299-84-3	Ronnel	66	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	122-34-9	Simazine	94	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	3689-24-5	Sulfotep	56	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	35400-43-2	Sulprofos	66	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	5902-51-2	Terbacil	280	ug/kg	UJ
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	94	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	21	ug/kg	J
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	43121-43-3	Triademefon	240	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	2303-17-5	Triallate	280	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	1582-09-8	Trifluralin	140	ug/kg	U
97490850	12/3/1997	Walleye	WB	Columbia River	Pacific Ocean	7	B	81	4		N	6.9	EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	510	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	15972-60-8	Alachlor	310	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	834-12-8	Ametryn	85	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	1610-17-9	Atraton			R
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	1912-24-9	Atrazine	85	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	140	ug/kg	U
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	140	ug/kg	U
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	1861-40-1	Benefin	130	ug/kg	U
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	170	ug/kg	U
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	314-40-9	Bromacil	340	ug/kg	U
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	23184-66-9	Butachlor	510	ug/kg	U
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	2008-41-5	Butylate	170	ug/kg	U
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	2425-06-1	Captafol	220	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	133-06-2	Captan	120	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	786-19-6	Carbophenothion	85	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	340	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	68	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	340	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	56-72-4	Coumaphos	100	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	21725-46-2	Cyanazine	130	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	1134-23-2	Cycloate	170	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	1897-45-6	Daconil	200	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	34	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	78-48-8	DEF	100	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	2303-16-4	Diallate-II	600	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	333-41-5	Diazinon	68	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	170	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	120-36-5	Dichloroprop	94	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	62-73-7	Dichlorvos	68	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	60-57-1	Dieldrin	34	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	78-34-2	Dioxathion	140	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	957-51-7	Diphenamid	260	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	330-54-1	Diuron	170	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	959-98-8	Endosulfan I	34	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	34	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	34	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	72-20-8	Endrin	34	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	34	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	34	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	2104-64-5	EPN	85	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	759-94-4	Eptam	170	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	130	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	563-12-2	Ethion	60	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	13194-48-4	Ethoprop	68	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	85	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	60168-88-9	Fenarimol	260	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	60	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	55-38-9	Fenthion	60	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	340	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	944-22-9	Fonophos	51	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	961-11-5	Gardona	170	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	8.5	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	732-11-6	Imidan	94	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	115-32-2	Kelthane	170	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	121-75-5	Malathion	68	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	150-50-5	Merphos	100	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	51218-45-2	Metholachlor	340	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	72-43-5	Methoxychlor	34	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	68	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	150	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	21087-64-9	Metribuzin	85	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	7786-34-7	Mevinphos	170	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	113-48-4	MGK-264	680	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	2212-67-1	Molinate	170	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	15299-99-7	Napropamide	260	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	27314-13-2	Norflurazon	170	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	340	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	56-38-2	Parathion	68	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	68	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	1114-71-2	Pebulate	170	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	130	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	8.5	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	298-02-2	Phorate	60	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	26399-36-0	Profluralin	200	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	1610-18-0	Prometon	85	ug/kg	UJ

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	7287-19-6	Prometryne	85	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	340	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	200	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	2312-35-8	Propargite	170	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	139-40-2	Propazine	85	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	31218-83-4	Propetamphos	170	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	299-84-3	Ronnel	60	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	122-34-9	Simazine	85	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	3689-24-5	Sulfotep	51	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	35400-43-2	Sulprofos	60	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	5902-51-2	Terbacil	260	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	85	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	8.5	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	43121-43-3	Triademefon	220	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	2303-17-5	Triallate	260	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	1582-09-8	Trifluralin	130	ug/kg	UJ
97500950	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	13.1	EPA 8085	AED-Pest	1929-77-7	Vernolate	170	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	490	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	15972-60-8	Alachlor	300	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	834-12-8	Ametryn	82	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	1610-17-9	Atraton			R
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	1912-24-9	Atrazine	82	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	130	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	130	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	1861-40-1	Benefin	120	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	160	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	314-40-9	Bromacil	330	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	23184-66-9	Butachlor	490	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	2008-41-5	Butylate	160	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	2425-06-1	Captafol	210	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	133-06-2	Captan	120	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	786-19-6	Carbophenothion	82	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	330	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	66	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	330	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	56-72-4	Coumaphos	99	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	120	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	1134-23-2	Cycloate	160	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	1897-45-6	Daconil	200	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	33	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	78-48-8	DEF	99	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	2303-16-4	Diallate-II	580	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	333-41-5	Diazinon	66	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	160	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	120-36-5	Dichlorprop	90	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	62-73-7	Dichlorvos	66	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	60-57-1	Dieldrin	33	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	78-34-2	Vioxathion	140	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	957-51-7	Diphenamid	250	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	330-54-1	Diuron	160	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	33	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	33	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	33	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	72-20-8	Endrin	33	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	33	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	33	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	2104-64-5	EPN	82	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	759-94-4	Eptam	160	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	120	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	563-12-2	Ethion	58	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	66	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	82	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	250	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	58	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	55-38-9	Fenthion	58	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	330	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	944-22-9	Gonophos	49	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	961-11-5	Gardona	160	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	8.2	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	732-11-6	Imidan	90	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	115-32-2	Kelthane	160	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	121-75-5	Malathion	66	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	150-50-5	Merphos	99	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	330	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	33	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	66	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	150	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	82	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	7786-34-7	Mevinphos	160	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	113-48-4	MGK-264	660	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	2212-67-1	Molinate	160	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	15299-99-7	Napropamide	250	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	27314-13-2	Norflurazon	160	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	330	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	56-38-2	Parathion	66	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	66	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	1114-71-2	Pebulate	160	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	120	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	8.2	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	298-02-2	Phorate	58	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	26399-36-0	Profluralin	200	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	1610-18-0	Prometon	82	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	7287-19-6	Prometryne	82	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	330	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	200	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	2312-35-8	Propargite	160	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	139-40-2	Propazine	82	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	160	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	299-84-3	Ronnel	58	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	122-34-9	Simazine	82	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	49	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	35400-43-2	Sulprofos	58	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	5902-51-2	Terbacil	250	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	82	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	8.2	ug/kg	UJ
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	43121-43-3	Triademefon	210	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	2303-17-5	Triallate	250	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	120	ug/kg	U
97500951	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	14.5	EPA 8085	AED-Pest	1929-77-7	Vernolate	160	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	600	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	15972-60-8	Alachlor	360	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	834-12-8	Ametryn	100	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	1610-17-9	Atraton			R
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	1912-24-9	Atrazine	100	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	200	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	314-40-9	Bromacil	400	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	23184-66-9	Butachlor	600	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	2008-41-5	Butylate	200	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	2425-06-1	Captafol	260	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	786-19-6	Carbophenothion	100	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	400	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	80	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	400	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	1134-23-2	Cycloate	200	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	1897-45-6	Daconil	240	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	40	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	2303-16-4	Diallate-II	700	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	333-41-5	Diazinon	80	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	200	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	62-73-7	Dichlorvos	80	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	60-57-1	Dieldrin	40	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	957-51-7	Diphenamid	300	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	330-54-1	Diuron	200	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	959-98-8	Endosulfan I	40	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	40	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	40	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	72-20-8	Endrin	40	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	40	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	40	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	2104-64-5	EPN	100	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	759-94-4	Eptam	200	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	563-12-2	Ethion	70	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	13194-48-4	Ethoprop	80	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	100	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	60168-88-9	Fenarimol	300	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	70	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	55-38-9	Fenthion	70	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	400	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	944-22-9	Fonophos	60	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	961-11-5	Gardona	200	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	1.5	ug/kg	NJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	732-11-6	Imidaz	110	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	115-32-2	Kelthane	200	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	121-75-5	Malathion	80	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	51218-45-2	Metholachlor	400	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	72-43-5	Methoxychlor	40	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	80	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	21087-64-9	Metribuzin	100	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	7786-34-7	Mevinphos	200	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	113-48-4	MGK-264	800	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	2212-67-1	Molinate	200	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	15299-99-7	Napropamide	300	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	27314-13-2	Norflurazon	200	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	400	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	56-38-2	Parathion	80	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	80	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	1114-71-2	Pebulate	200	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	5.8	ug/kg	NJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	298-02-2	Phorate	70	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	26399-36-0	Profluralin	240	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	1610-18-0	Prometon	100	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	7287-19-6	Prometryne	100	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	400	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	240	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	2312-35-8	Propargite	200	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	139-40-2	Propazine	100	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	31218-83-4	Propetamphos	200	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	299-84-3	Ronnel	70	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	122-34-9	Simazine	100	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	3689-24-5	Sulfotep	60	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	35400-43-2	Sulprofos	70	ug/kg	UJ

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	5902-51-2	Terbacil	300	ug/kg	UJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	100	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	15	ug/kg	NJ
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	43121-43-3	Triademefon	260	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	2303-17-5	Triallate	300	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
97500952	12/9/1997	Channel Catfish	WB	Columbia River	Pacific Ocean	8	F	84	6		N	21	EPA 8085	AED-Pest	1929-77-7	Vernolate	200	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	570	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	15972-60-8	Alachlor	340	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	834-12-8	Ametryn	95	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	1610-17-9	Atraton			R
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	1912-24-9	Atrazine	95	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	314-40-9	Bromacil	380	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	23184-66-9	Butachlor	570	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	786-19-6	Carbophenothion	95	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	380	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	76	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	380	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	56-72-4	Coumaphos	110	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	38	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	78-48-8	DEF	110	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	2303-16-4	Diallate-II	670	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	333-41-5	Diazinon	76	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	120-36-5	Dichloroprop	100	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	62-73-7	Dichlorvos	76	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	60-57-1	Dieldrin	38	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	957-51-7	Diphenamid	290	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	959-98-8	Endosulfan I	38	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	38	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	38	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	72-20-8	Endrin	38	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	38	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	38	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	2104-64-5	EPN	95	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	563-12-2	Ethion	67	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	13194-48-4	Ethoprop	76	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	95	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	60168-88-9	Fenarimol	290	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	67	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	55-38-9	Fenthion	67	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	380	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	944-22-9	Fonophos	57	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	190	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	732-11-6	Imidan	100	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	121-75-5	Malathion	76	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	150-50-5	Merphos	110	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	51218-45-2	Metholachlor	380	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	72-43-5	Methoxychlor	38	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	76	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	21087-64-9	Metribuzin	95	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	113-48-4	MGK-264	760	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	15299-99-7	Napropamide	290	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	380	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	56-38-2	Parathion	76	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	76	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	5.5	ug/kg	J
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	298-02-2	Phorate	67	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	1610-18-0	Prometon	95	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	7287-19-6	Prometryne	95	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	380	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	139-40-2	Propazine	95	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	299-84-3	Ronnel	67	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	122-34-9	Simazine	95	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	3689-24-5	Sulfotep	57	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	35400-43-2	Sulprofos	67	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	5902-51-2	Terbacil	290	ug/kg	UJ
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	95	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	10	ug/kg	J
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	2303-17-5	Triallate	290	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	1582-09-8	Trifluralin	140	ug/kg	U
97500966	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	N	7.3	EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	590	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	15972-60-8	Alachlor	350	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	834-12-8	Ametryn	98	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	1610-17-9	Atraton			R
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	1912-24-9	Atrazine	98	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	200	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	314-40-9	Bromacil	390	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	23184-66-9	Butachlor	590	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	2008-41-5	Butylate	200	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	786-19-6	Carbophenothion	98	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	390	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	78	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	390	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	1134-23-2	Cycloate	200	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	1897-45-6	Daconil	240	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	39	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	2303-16-4	Diallate-II	690	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	333-41-5	Diazinon	78	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	200	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	120-36-5	Dichloroprop	110	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	62-73-7	Dichlorvos	78	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	60-57-1	Dieldrin	39	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	957-51-7	Diphenamid	290	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	330-54-1	Diuron	200	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	959-98-8	Endosulfan I	39	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	39	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	39	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	72-20-8	Endrin	39	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	39	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	39	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	2104-64-5	EPN	98	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	759-94-4	Eptam	200	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	563-12-2	Ethion	69	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	13194-48-4	Ethoprop	78	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	98	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	60168-88-9	Fenarimol	290	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	69	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	55-38-9	Fenthion	69	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	390	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	944-22-9	Fonophos	59	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	961-11-5	Gardona	200	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	200	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	115-32-2	Kelthane	200	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	121-75-5	Malathion	78	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	51218-45-2	Metholachlor	390	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	72-43-5	Methoxychlor	39	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	78	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	21087-64-9	Metribuzin	98	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	7786-34-7	Mevinphos	200	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	113-48-4	MGK-264	780	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	2212-67-1	Molinate	200	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	15299-99-7	Napropamide	290	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	27314-13-2	Norflurazon	200	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	390	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	56-38-2	Parathion	78	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	78	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	1114-71-2	Pebulate	200	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	4.1	ug/kg	J
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	298-02-2	Phorate	69	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	26399-36-0	Profluralin	240	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	1610-18-0	Prometon	98	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	7287-19-6	Prometryne	98	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	390	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	240	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	2312-35-8	Propargite	200	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	139-40-2	Propazine	98	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	31218-83-4	Propetamphos	200	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	299-84-3	Ronnel	69	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	122-34-9	Simazine	98	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	3689-24-5	Sulfotep	59	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	35400-43-2	Sulprofos	69	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	5902-51-2	Terbacil	290	ug/kg	UJ
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	98	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	13	ug/kg	J
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	2303-17-5	Triallate	290	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
97500967	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	B	82	1	8	D	7.7	EPA 8085	AED-Pest	1929-77-7	Vernolate	200	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	580	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	15972-60-8	Alachlor	350	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	834-12-8	Ametryn	96	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	1610-17-9	Atraton			R
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	1912-24-9	Atrazine	96	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	314-40-9	Bromacil	380	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	23184-66-9	Butachlor	580	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	786-19-6	Carbophenothion	96	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	380	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	77	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	380	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	38	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	2303-16-4	Diallate-II	670	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	333-41-5	Diazinon	77	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	62-73-7	Dichlorvos	77	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	60-57-1	Dieldrin	38	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	957-51-7	Diphenamid	290	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	959-98-8	Endosulfan I	38	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	38	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	38	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	72-20-8	Endrin	38	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	38	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	38	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	2104-64-5	EPN	96	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	563-12-2	Ethion	67	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	13194-48-4	Ethoprop	77	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	96	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	60168-88-9	Fenarimol	290	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	67	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	55-38-9	Fenthion	67	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	380	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	944-22-9	Fonophos	58	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	2.9	ug/kg	J
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	121-75-5	Malathion	77	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	51218-45-2	Metholachlor	380	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	72-43-5	Methoxychlor	38	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	77	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	21087-64-9	Metribuzin	96	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	113-48-4	MGK-264	770	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	15299-99-7	Napropamide	290	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	380	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	56-38-2	Parathion	77	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	77	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	8.3	ug/kg	J
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	298-02-2	Phorate	67	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	1610-18-0	Prometon	96	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	7287-19-6	Prometryne	96	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	380	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	139-40-2	Propazine	96	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	299-84-3	Ronnel	67	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	122-34-9	Simazine	96	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	3689-24-5	Sulfotep	58	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	35400-43-2	Sulprofos	67	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	5902-51-2	Terbacil	290	ug/kg	UJ
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	96	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	24	ug/kg	J
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	2303-17-5	Triallate	290	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	1582-09-8	Trifluralin	140	ug/kg	U
97500968	12/9/1997	White Sturgeon	FW	Columbia River	Pacific Ocean	9	A	82	1		N	13.9	EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	580	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	15972-60-8	Alachlor	350	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	834-12-8	Ametryn	97	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	1610-17-9	Atraton			R
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	1912-24-9	Atrazine	97	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	314-40-9	Bromacil	390	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	23184-66-9	Butachlor	580	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	786-19-6	Carbophenothion	97	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	390	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	78	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	390	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	2136-79-0	DACHTAL-DCPA	39	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	2303-16-4	Diallate-II	680	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	333-41-5	Diazinon	78	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	120-36-5	Dichloroprop	110	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	62-73-7	Dichlorvos	78	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	60-57-1	Dieldrin	39	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	957-51-7	Diphenamid	290	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	959-98-8	Endosulfan I	39	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	39	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	39	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	72-20-8	Endrin	39	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	39	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	39	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	2104-64-5	EPN	97	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	563-12-2	Ethion	68	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	13194-48-4	Ethoprop	78	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	97	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	60168-88-9	Fenarimol	290	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	68	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	55-38-9	Fenthion	68	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	390	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	944-22-9	Fonophos	58	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	190	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	121-75-5	Malathion	78	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	51218-45-2	Metholachlor	390	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	72-43-5	Methoxychlor	39	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	78	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	21087-64-9	Metribuzin	97	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	113-48-4	MGK-264	780	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	15299-99-7	Napropamide	290	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	390	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	56-38-2	Parathion	78	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	78	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	3.9	ug/kg	J
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	298-02-2	Phorate	68	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	1610-18-0	Prometon	97	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	7287-19-6	Prometryne	97	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	390	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	139-40-2	Propazine	97	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	299-84-3	Ronnel	68	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	122-34-9	Simazine	97	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	3689-24-5	Sulfotep	58	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	35400-43-2	Sulprofos	68	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	34014-18-1	Sulbuthiuron			R
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	5902-51-2	Terbacil	290	ug/kg	UJ
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	97	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	13	ug/kg	J
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	2303-17-5	Triallate	290	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
97500969	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1	r2	N	11.1	EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	570	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	15972-60-8	Alachlor	340	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	834-12-8	Ametryn	94	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	1610-17-9	Atraton			R
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	1912-24-9	Atrazine	94	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	314-40-9	Bromacil	380	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	23184-66-9	Butachlor	570	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	786-19-6	Carbophenothion	94	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	380	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	75	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	380	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	56-72-4	Coumaphos	110	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	38	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	78-48-8	DEF	110	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	2303-16-4	Diallate-II	660	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	333-41-5	Diazinon	75	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	120-36-5	Dichlorprop	100	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	62-73-7	Dichlorvos	75	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	60-57-1	Dieldrin	38	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	957-51-7	Diphenamid	280	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	959-98-8	Endosulfan I	38	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	38	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	38	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	72-20-8	Endrin	38	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	38	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	38	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	2104-64-5	EPN	94	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	563-12-2	Ethion	66	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	13194-48-4	Ethoprop	75	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	94	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	60168-88-9	Fenarimol	280	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	66	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	55-38-9	Fenthion	66	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	380	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	944-22-9	Fonophos	57	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	190	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	732-11-6	Imidan	100	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	121-75-5	Malathion	75	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	150-50-5	Merphos	110	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	57837-19-1	Methalaxyl			R
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	51218-45-2	Metholachlor	380	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	72-43-5	Methoxychlor	38	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	75	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	21087-64-9	Metribuzin	94	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	113-48-4	MGK-264	750	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	15299-99-7	Napropamide	280	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	380	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	56-38-2	Parathion	75	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	75	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	40487-42-1	Permethalin	140	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	2.8	ug/kg	J
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	298-02-2	Phorate	66	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	1610-18-0	Prometon	94	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	7287-19-6	Prometryne	94	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	380	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	139-40-2	Propazine	94	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	299-84-3	Ronnel	66	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	122-34-9	Simazine	94	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	3689-24-5	Sulfotep	57	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	35400-43-2	Sulprofos	66	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	5902-51-2	Terbacil	280	ug/kg	UJ
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	94	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	14	ug/kg	J
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	2303-17-5	Triallate	280	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	1582-09-8	Trifluralin	140	ug/kg	U
97500971	#####	White Sturgeon	WB	Columbia River	Pacific Ocean	9	A	83	1		N	7.6	EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	560	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	15972-60-8	Alachlor	340	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	834-12-8	Ametryn	93	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	1912-24-9	Atrazine	93	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	314-40-9	Bromacil	370	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	23184-66-9	Butachlor	560	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	2425-06-1	Captafol	240	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	786-19-6	Carbophenothion	93	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	370	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	75	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	370	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	56-72-4	Coumaphos	110	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	1897-45-6	Daconil	220	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	37	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	78-48-8	DEF	110	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	2303-16-4	Diallate-II	650	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	333-41-5	Diazinon	75	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	120-36-5	Dichloroprop	100	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	62-73-7	Dichlorvos	75	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	60-57-1	Dieldrin	37	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	957-51-7	Diphenamid	280	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	959-98-8	Endosulfan I	3	ug/kg	NJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	37	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	37	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	72-20-8	Endrin	37	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	37	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	37	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	2104-64-5	EPN	93	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	55283-68-6	Ethalfifuralin (Sonalan)	140	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	563-12-2	Ethion	65	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	13194-48-4	Ethoprop	75	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	93	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	60168-88-9	Fenarimol	280	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	65	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	55-38-9	Fenthion	65	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	370	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	944-22-9	Fonophos	56	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.3	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	732-11-6	Imidan	100	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	121-75-5	Malathion	75	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	150-50-5	Merphos	110	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	51218-45-2	Metholachlor	370	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	72-43-5	Methoxychlor	37	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	75	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	21087-64-9	Metribuzin	93	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	113-48-4	MGK-264	750	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	15299-99-7	Napropamide	280	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	370	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	56-38-2	Parathion	75	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	75	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	6.7	ug/kg	J
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	298-02-2	Phorate	65	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	26399-36-0	Profluralin	220	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	1610-18-0	Prometon	93	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	7287-19-6	Prometryne	93	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	370	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	220	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	139-40-2	Propazine	93	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	299-84-3	Ronnel	65	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	122-34-9	Simazine	93	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	3689-24-5	Sulfotep	56	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	35400-43-2	Sulprofos	65	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	5902-51-2	Terbacil	280	ug/kg	UJ
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	93	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	18	ug/kg	J
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	43121-43-3	Triademefon	240	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	2303-17-5	Triallate	280	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	1582-09-8	Trifluralin	140	ug/kg	U
98024000	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	I	87	1		N	12.8	EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	550	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	15972-60-8	Alachlor	330	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	834-12-8	Ametryn	92	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	1912-24-9	Atrazine	92	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	180	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	314-40-9	Bromacil	370	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	23184-66-9	Butachlor	550	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	2008-41-5	Butylate	180	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	2425-06-1	Captafol	240	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	786-19-6	Carbophenothion	92	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	370	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	74	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	370	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	56-72-4	Coumaphos	110	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	1134-23-2	Cycloate	180	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	1897-45-6	Daconil	220	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	37	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	78-48-8	DEF	110	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	2303-16-4	Diallate-II	640	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	333-41-5	Diazinon	74	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	180	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	120-36-5	Dichlorprop	100	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	62-73-7	Dichlorvos	74	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	60-57-1	Dieldrin	37	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	957-51-7	Diphenamid	280	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	330-54-1	Diuron	180	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	959-98-8	Endosulfan I	37	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	37	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	37	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	72-20-8	Endrin	37	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	37	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	37	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	2104-64-5	EPN	92	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	759-94-4	Eptam	180	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	563-12-2	Ethion	64	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	13194-48-4	Ethoprop	74	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	92	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	60168-88-9	Fenarimol	280	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	64	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	55-38-9	Fenthion	64	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	370	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	944-22-9	Fonophos	55	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	961-11-5	Gardona	180	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.2	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	732-11-6	Imidan	100	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	115-32-2	Kelthane	180	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	121-75-5	Malathion	74	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	150-50-5	Merphos	110	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	51218-45-2	Metholachlor	370	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	72-43-5	Methoxychlor	37	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	74	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	21087-64-9	Metribuzin	92	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	7786-34-7	Mevinphos	180	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	113-48-4	MGK-264	740	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	2212-67-1	Molinate	180	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	15299-99-7	Napropamide	280	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	27314-13-2	Norflurazon	180	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	370	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	56-38-2	Parathion	74	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	74	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	1114-71-2	Pebulate	180	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	3.7	ug/kg	J
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	298-02-2	Phorate	64	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	26399-36-0	Profluralin	220	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	1610-18-0	Prometon	92	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	7287-19-6	Prometryne	92	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	370	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	220	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	2312-35-8	Propargite	180	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	139-40-2	Propazine	92	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	31218-83-4	Propetamphos	180	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	299-84-3	Ronnel	64	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	122-34-9	Simazine	92	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	3689-24-5	Sulfotep	55	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	35400-43-2	Sulprofos	64	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	5902-51-2	Terbacil	280	ug/kg	UJ
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	92	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	15	ug/kg	J
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	43121-43-3	Triademefon	240	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	2303-17-5	Triallate	280	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	1582-09-8	Trifluralin	140	ug/kg	U
98024001	1/7/1998	White Sturgeon	WB	Columbia River	Pacific Ocean	9	F	87	1		N	5.9	EPA 8085	AED-Pest	1929-77-7	Vernolate	180	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	560	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	15972-60-8	Alachlor	340	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	834-12-8	Ametryn	94	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	1912-24-9	Atrazine	94	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	314-40-9	Bromacil	370	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	23184-66-9	Butachlor	560	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	2425-06-1	Captafol	240	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	786-19-6	Carbophenothion	94	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	370	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	75	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	370	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	56-72-4	Coumaphos	110	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	1897-45-6	Daconil	220	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	37	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	78-48-8	DEF	110	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	2303-16-4	Diallate-II	650	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	333-41-5	Diazinon	75	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	120-36-5	Dichloroprop	100	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	62-73-7	Dichlorvos	75	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	60-57-1	Dieldrin	37	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	957-51-7	Diphenamid	280	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	959-98-8	Endosulfan I	37	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	37	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	37	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	72-20-8	Endrin	37	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	37	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	37	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	2104-64-5	EPN	94	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	563-12-2	Ethion	65	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	13194-48-4	Ethoprop	75	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	94	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	60168-88-9	Fenarimol	280	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	65	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	55-38-9	Fenthion	65	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	370	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	944-22-9	Fonophos	56	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.2	ug/kg	J
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	732-11-6	Imidan	100	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	121-75-5	Malathion	75	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	150-50-5	Merphos	110	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	51218-45-2	Metholachlor	370	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	72-43-5	Methoxychlor	37	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	75	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	21087-64-9	Metribuzin	94	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	113-48-4	MGK-264	750	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	15299-99-7	Napropamide	280	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	370	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	56-38-2	Parathion	75	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	75	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	13	ug/kg	J
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	298-02-2	Phorate	65	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	26399-36-0	Profluralin	220	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	1610-18-0	Prometon	94	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	7287-19-6	Prometryne	94	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	370	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	220	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	139-40-2	Propazine	94	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	299-84-3	Ronnel	65	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	122-34-9	Simazine	94	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	3689-24-5	Sulfotep	56	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	35400-43-2	Sulprofos	65	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	5902-51-2	Terbacil	280	ug/kg	UJ
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	94	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	65	ug/kg	J
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	43121-43-3	Triademefon	240	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	2303-17-5	Triallate	280	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	1582-09-8	Trifluralin	140	ug/kg	U
98024002	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	N	7.3	EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	560	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	15972-60-8	Alachlor	340	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	834-12-8	Ametryn	93	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	1912-24-9	Atrazine	93	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	314-40-9	Bromacil	370	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	23184-66-9	Butachlor	560	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	2425-06-1	Captafol	240	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	786-19-6	Carbophenothion	93	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	370	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	75	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	370	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	56-72-4	Coumaphos	110	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	1897-45-6	Daconil	220	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	37	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	78-48-8	DEF	110	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	2303-16-4	Diallate-II	650	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	333-41-5	Diazinon	75	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	120-36-5	Dichloroprop	100	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	62-73-7	Dichlorvos	75	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	60-57-1	Dieldrin	37	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	957-51-7	Diphenamid	280	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	959-98-8	Endosulfan I	37	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	37	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	37	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	72-20-8	Endrin	37	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	37	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	37	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	2104-64-5	EPN	93	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	563-12-2	Ethion	65	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	13194-48-4	Ethoprop	75	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	93	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	60168-88-9	Fenarimol	280	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	65	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	55-38-9	Fenthion	65	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	370	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	944-22-9	Fonophos	56	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	8.9	ug/kg	J
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	732-11-6	Imidan	100	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	121-75-5	Malathion	75	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	150-50-5	Merphos	110	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	51218-45-2	Metholachlor	370	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	72-43-5	Methoxychlor	37	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	75	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	21087-64-9	Metribuzin	93	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	113-48-4	MGK-264	750	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	15299-99-7	Napropamide	280	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	370	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	56-38-2	Parathion	75	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	75	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	14	ug/kg	J
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	298-02-2	Phorate	65	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	26399-36-0	Profluralin	220	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	1610-18-0	Prometon	93	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	7287-19-6	Prometryne	93	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	370	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	220	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	139-40-2	Propazine	93	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	299-84-3	Ronnel	65	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	122-34-9	Simazine	93	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	3689-24-5	Sulfotep	56	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	35400-43-2	Sulprofos	65	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	5902-51-2	Terbacil	280	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	93	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	49	ug/kg	J
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	43121-43-3	Triadamefon	240	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	2303-17-5	Triallate	280	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	1582-09-8	Trifluralin	140	ug/kg	UJ
98024003	1/8/1998	White Sturgeon	FW	Columbia River	Pacific Ocean	9	I	88	1	9	D	7	EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	590	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	15972-60-8	Alachlor	360	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	834-12-8	Ametryn	99	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	1912-24-9	Atrazine	99	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	200	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	314-40-9	Bromacil	400	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	23184-66-9	Butachlor	590	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	2008-41-5	Butylate	200	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	2425-06-1	Captafol	260	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	786-19-6	Carbophenothion	99	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	400	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	79	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	400	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	1134-23-2	Cycloate	200	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	1897-45-6	Daconil	240	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	40	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	2303-16-4	Diallate-II	690	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	333-41-5	Diazinon	79	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	200	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	62-73-7	Dichlorvos	79	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	60-57-1	Dieldrin	40	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	957-51-7	Diphenamid	300	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	330-54-1	Diuron	200	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	959-98-8	Endosulfan I	40	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	40	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	40	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	72-20-8	Endrin	40	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	40	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	40	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	2104-64-5	EPN	99	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	759-94-4	Eptam	200	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	563-12-2	Ethion	69	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	13194-48-4	Ethoprop	79	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	99	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	60168-88-9	Fenarimol	300	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	69	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	55-38-9	Fenthion	69	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	400	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	944-22-9	Fonophos	59	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	961-11-5	Gardona	200	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	115-32-2	Kelthane	200	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	121-75-5	Malathion	79	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	51218-45-2	Metholachlor	400	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	72-43-5	Methoxychlor	40	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	79	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	21087-64-9	Metribuzin	99	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	7786-34-7	Mevinphos	200	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	113-48-4	MGK-264	790	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	2212-67-1	Molinate	200	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	15299-99-7	Napropamide	300	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	27314-13-2	Norflurazon	200	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	400	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	56-38-2	Parathion	79	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	79	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	1114-71-2	Pebulate	200	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	298-02-2	Phorate	69	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	26399-36-0	Profluralin	240	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	1610-18-0	Prometon	99	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	7287-19-6	Prometryne	99	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	400	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	240	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	2312-35-8	Propargite	200	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	139-40-2	Propazine	99	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	31218-83-4	Propetamphos	200	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	299-84-3	Ronnel	69	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	122-34-9	Simazine	99	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	3689-24-5	Sulfotep	59	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	35400-43-2	Sulprofos	69	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	5902-51-2	Terbacil	300	ug/kg	UJ
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	886-50-0	Abate (Temephos)	99	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	43121-43-3	Triademefon	260	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	2303-17-5	Triallate	300	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
98064095	2/5/1998	Steelhead	WB	Columbia River	Pacific Ocean	8	F	90	3		N	8.4	EPA 8085	AED-Pest	1929-77-7	Vernolate	200	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	610	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	15972-60-8	Alachlor	370	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	834-12-8	Ametryn	100	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1912-24-9	Atrazine	100	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	200	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	314-40-9	Bromacil	410	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	23184-66-9	Butachlor	610	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	2008-41-5	Butylate	200	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	2425-06-1	Captafol	270	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	786-19-6	Carbophenothion	100	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	410	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	82	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	410	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1134-23-2	Cycloate	200	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1897-45-6	Daconil	240	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	41	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	2303-16-4	Diallate-II	710	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	333-41-5	Diazinon	82	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	200	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	62-73-7	Dichlorvos	82	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	60-57-1	Dieldrin	41	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	957-51-7	Diphenamid	310	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	330-54-1	Diuron	200	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	959-98-8	Endosulfan I	2.4	ug/kg	NJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	41	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	41	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	72-20-8	Endrin	41	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	41	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	41	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	2104-64-5	EPN	100	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	759-94-4	Eptam	200	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	563-12-2	Ethion	71	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	13194-48-4	Ethoprop	82	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	100	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	60168-88-9	Fenarimol	310	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	71	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	55-38-9	Fenthion	71	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	410	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	944-22-9	Fonophos	61	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	961-11-5	Gardona	200	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	115-32-2	Kelthane	200	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	121-75-5	Malathion	82	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	51218-45-2	Metholachlor	410	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	72-43-5	Methoxychlor	41	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	82	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	21087-64-9	Metribuzin	100	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	7786-34-7	Mevinphos	200	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	113-48-4	MGK-264	820	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	2212-67-1	Molinate	200	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	15299-99-7	Napropamide	310	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	27314-13-2	Norflurazon	200	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	410	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	56-38-2	Parathion	82	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	82	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1114-71-2	Pebulate	200	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	298-02-2	Phorate	71	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	26399-36-0	Profluralin	240	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1610-18-0	Prometon	100	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	7287-19-6	Prometryne	100	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	410	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	240	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	2312-35-8	Propargite	200	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	139-40-2	Propazine	100	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	31218-83-4	Propetamphos	200	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	299-84-3	Ronnel	71	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	122-34-9	Simazine	100	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	3689-24-5	Sulfotep	61	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	35400-43-2	Sulprofos	71	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	5902-51-2	Terbacil	310	ug/kg	UJ
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	100	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	43121-43-3	Triademefon	270	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	2303-17-5	Triallate	310	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
98124150	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1929-77-7	Vernolate	200	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	600	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	15972-60-8	Alachlor	360	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	834-12-8	Ametryn	100	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	1912-24-9	Atrazine	100	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	200	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	314-40-9	Bromacil	400	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	23184-66-9	Butachlor	600	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	2008-41-5	Butylate	200	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	2425-06-1	Captafol	260	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	786-19-6	Carbophenothion	100	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	400	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	1.6	ug/kg	J
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	400	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	1134-23-2	Cycloate	200	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	1897-45-6	Daconil	240	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	40	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	2303-16-4	Diallate-II	710	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	333-41-5	Diazinon	81	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	200	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	62-73-7	Dichlorvos	81	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	60-57-1	Dieldrin	40	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	957-51-7	Diphenamid	300	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	330-54-1	Diuron	200	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	959-98-8	Endosulfan I	2.2	ug/kg	J
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	40	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	40	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	72-20-8	Endrin	40	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	40	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	40	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	2104-64-5	EPN	100	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	759-94-4	Eptam	200	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	563-12-2	Ethion	71	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	13194-48-4	Ethoprop	81	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	100	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	60168-88-9	Fenarimol	300	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	71	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	55-38-9	Fenthion	71	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	400	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	944-22-9	Fonophos	60	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	961-11-5	Gardona	200	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	115-32-2	Kelthane	200	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	121-75-5	Malathion	81	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	51218-45-2	Metholachlor	400	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	72-43-5	Methoxychlor	40	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	81	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	21087-64-9	Metribuzin	100	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	7786-34-7	Mevinphos	200	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	113-48-4	MGK-264	810	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	2212-67-1	Molinate	200	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	15299-99-7	Napropamide	300	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	27314-13-2	Norflurazon	200	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	400	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	56-38-2	Parathion	81	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	81	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	1114-71-2	Pebulate	200	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	298-02-2	Phorate	71	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	26399-36-0	Profluralin	240	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	1610-18-0	Prometon	100	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	7287-19-6	Prometryne	100	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	23950-58-5	Propamide (kerb)	400	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	240	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	2312-35-8	Propargite	200	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	139-40-2	Propazine	100	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	31218-83-4	Propetamphos	200	ug/kg	UJ

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	299-84-3	Ronnel	71	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	122-34-9	Simazine	100	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	3689-24-5	Sulfotep	60	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	35400-43-2	Sulprofos	71	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	5902-51-2	Terbacil	300	ug/kg	UJ
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	100	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	43121-43-3	Triademefon	260	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	2303-17-5	Triallate	300	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
98124151	3/17/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.9	EPA 8085	AED-Pest	1929-77-7	Vernolate	200	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	580	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	15972-60-8	Alachlor	350	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	834-12-8	Ametryn	96	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1912-24-9	Atrazine	96	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	314-40-9	Bromacil	380	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	23184-66-9	Butachlor	580	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	786-19-6	Carbophenothion	96	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	380	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	6.7	ug/kg	J
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	380	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1134-23-2	Dacloate	190	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	38	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	2303-16-4	Diallate-II	670	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	333-41-5	Diazinon	77	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	62-73-7	Dichlorvos	77	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	60-57-1	Dieldrin	38	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	957-51-7	Diphenamid	290	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	959-98-8	Endosulfan I	2.1	ug/kg	J
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	1.1	ug/kg	NJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	38	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	72-20-8	Endrin	38	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	38	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	38	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	2104-64-5	EPN	96	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	563-12-2	Ethion	67	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	13194-48-4	Ethoprop	77	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	96	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	60168-88-9	Fenarimol	290	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	67	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	55-38-9	Fenthion	67	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	380	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	944-22-9	Fonophos	58	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	121-75-5	Malathion	77	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	51218-45-2	Metholachlor	380	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	72-43-5	Methoxychlor	38	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	77	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	21087-64-9	Metribuzin	96	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	113-48-4	MGK-264	770	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	15299-99-7	Napropamide	290	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	380	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	56-38-2	Parathion	77	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	77	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	298-02-2	Phorate	67	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1610-18-0	Prometon	96	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	7287-19-6	Prometryne	96	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	380	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	139-40-2	Propazine	96	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	299-84-3	Ronnel	67	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	122-34-9	Simazine	96	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	3689-24-5	Sulfotep	58	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	35400-43-2	Sulprofos	67	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	5902-51-2	Terbacil	290	ug/kg	UJ
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	96	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	2303-17-5	Triallate	290	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1582-09-8	Trifluralin	140	ug/kg	U
98124152	3/24/1998	Steelhead	WB	Yakima River	Columbia River	48	F	91	4		N	2.2	EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	590	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	15972-60-8	Alachlor	360	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	834-12-8	Ametryn	99	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	1912-24-9	Atrazine	99	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	200	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	314-40-9	Bromacil	400	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	23184-66-9	Butachlor	590	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	2008-41-5	Butylate	200	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	2425-06-1	Captafol	260	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	786-19-6	Carbophenothion	99	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	400	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	7.7	ug/kg	J
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	400	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	1134-23-2	Cycloate	200	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	1897-45-6	Daconil	240	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	40	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	2303-16-4	Diallate-II	690	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	333-41-5	Diazinon	79	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	200	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	120-36-5	Dichloroprop	110	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	62-73-7	Dichlorvos	79	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	60-57-1	Dieldrin	40	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	957-51-7	Diphenamid	300	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	330-54-1	Diuron	200	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	959-98-8	Endosulfan I	1.7	ug/kg	J
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	0.83	ug/kg	NJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	40	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	72-20-8	Endrin	40	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	40	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	40	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	2104-64-5	EPN	99	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	759-94-4	Eptam	200	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	563-12-2	Ethion	69	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	13194-48-4	Ethoprop	79	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	99	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	60168-88-9	Fenarimol	300	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	69	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	55-38-9	Fenthion	69	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	400	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	944-22-9	Fonophos	59	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	961-11-5	Gardona	200	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	115-32-2	Kelthane	200	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	121-75-5	Malathion	79	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	51218-45-2	Metholachlor	400	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	72-43-5	Methoxychlor	40	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	79	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	21087-64-9	Metribuzin	99	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	7786-34-7	Mevinphos	200	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	113-48-4	MGK-264	790	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	2212-67-1	Molinate	200	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	15299-99-7	Napropamide	300	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	27314-13-2	Norflurazon	200	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	400	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	56-38-2	Parathion	79	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	79	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	1114-71-2	Pebulate	200	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	298-02-2	Phorate	69	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	26399-36-0	Profluralin	240	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	1610-18-0	Prometon	99	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	7287-19-6	Prometryne	99	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	400	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	240	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	2312-35-8	Propargite	200	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	139-40-2	Propazine	99	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	31218-83-4	Propetamphos	200	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	299-84-3	Ronnel	69	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	122-34-9	Simazine	99	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	3689-24-5	Sulfotep	59	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	35400-43-2	Sulprofos	69	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	5902-51-2	Terbacil	300	ug/kg	UJ
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	99	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	43121-43-3	Triademefon	260	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	2303-17-5	Triallate	300	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
98124153	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	1.9	EPA 8085	AED-Pest	1929-77-7	Vernolate	200	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	540	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	15972-60-8	Alachlor	320	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	834-12-8	Ametryn	90	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	1912-24-9	Atrazine	90	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	140	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	140	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	1861-40-1	Benefin	130	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	180	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	314-40-9	Bromacil	360	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	23184-66-9	Butachlor	540	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	2008-41-5	Butylate	180	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	2425-06-1	Captafol	230	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	786-19-6	Carbophenothion	90	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	360	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	7.7	ug/kg	J
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	360	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	56-72-4	Coumaphos	110	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	21725-46-2	Cyanazine	130	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	1134-23-2	Cycloate	180	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	1897-45-6	Daconil	220	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	36	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	78-48-8	DEF	110	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	2303-16-4	Diallate-II	630	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	333-41-5	Diazinon	72	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	180	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	120-36-5	Dichloroprop	99	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	62-73-7	Dichlorvos	72	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	60-57-1	Dieldrin	36	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	78-34-2	Dioxathion	150	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	957-51-7	Diphenamid	270	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	330-54-1	Diuron	180	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	959-98-8	Endosulfan I	4	ug/kg	J
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	1.6	ug/kg	J
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	36	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	72-20-8	Endrin	36	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	36	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	36	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	2104-64-5	EPN	90	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	759-94-4	Eptam	180	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	130	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	563-12-2	Ethion	63	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	13194-48-4	Ethoprop	72	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	90	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	60168-88-9	Fenarimol	270	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	63	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	55-38-9	Fenthion	63	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	360	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	944-22-9	Fonophos	54	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	961-11-5	Gardona	180	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	732-11-6	Imidan	99	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	115-32-2	Kelthane	180	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	121-75-5	Malathion	72	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	150-50-5	Merphos	110	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	51218-45-2	Metholachlor	360	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	72-43-5	Methoxychlor	36	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	72	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	160	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	21087-64-9	Metribuzin	90	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	7786-34-7	Mevinphos	180	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	113-48-4	MGK-264	720	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	2212-67-1	Molinate	180	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	15299-99-7	Napropamide	270	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	27314-13-2	Norflurazon	180	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	360	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	56-38-2	Parathion	72	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	72	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	1114-71-2	Pebulate	180	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	130	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	298-02-2	Phorate	63	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	26399-36-0	Profluralin	220	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	1610-18-0	Prometon	90	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	7287-19-6	Prometryne	90	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	360	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	220	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	2312-35-8	Propargite	180	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	139-40-2	Propazine	90	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	31218-83-4	Propetamphos	180	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	299-84-3	Ronnel	63	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	122-34-9	Simazine	90	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	3689-24-5	Sulfotep	54	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	35400-43-2	Sulprofos	63	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	5902-51-2	Terbacil	270	ug/kg	UJ
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	90	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	43121-43-3	Triademefon	230	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	2303-17-5	Triallate	270	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	1582-09-8	Trifluralin	130	ug/kg	U
98124154	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3.4	EPA 8085	AED-Pest	1929-77-7	Verolate	180	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	580	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	15972-60-8	Alachlor	350	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	834-12-8	Ametryn	97	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	1912-24-9	Atrazine	97	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	314-40-9	Bromacil	390	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	23184-66-9	Butachlor	580	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	786-19-6	Carbophenothion	97	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	390	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	7.7	ug/kg	J
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	390	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	39	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	2303-16-4	Diallate-II	680	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	333-41-5	Diazinon	77	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	120-36-5	Dichloroprop	110	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	62-73-7	Dichlorvos	77	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	60-57-1	Dieldrin	2.7	ug/kg	NJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	957-51-7	Diphenamid	290	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	959-98-8	Endosulfan I	2.5	ug/kg	J
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	0.91	ug/kg	NJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	39	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	72-20-8	Endrin	39	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	39	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	39	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	2104-64-5	EPN	97	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	563-12-2	Ethion	68	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	13194-48-4	Ethoprop	77	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	97	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	60168-88-9	Fenarimol	290	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	68	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	55-38-9	Fenthion	68	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	390	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	944-22-9	Fonophos	58	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	121-75-5	Malathion	77	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	51218-45-2	Metholachlor	390	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	72-43-5	Methoxychlor	39	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	77	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	21087-64-9	Metribuzin	97	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	113-48-4	MGK-264	770	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	15299-99-7	Napropamide	290	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	390	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	56-38-2	Parathion	77	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	77	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	298-02-2	Phorate	68	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	1610-18-0	Prometon	97	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	7287-19-6	Prometryne	97	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	390	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	139-40-2	Propazine	97	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	299-84-3	Ronnel	68	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	122-34-9	Simazine	97	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	3689-24-5	Sulfotep	58	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	35400-43-2	Sulprofos	68	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	5902-51-2	Terbacil	290	ug/kg	UJ
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	97	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	2303-17-5	Triallate	290	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	1582-09-8	Trifluralin	140	ug/kg	U
98124155	3/24/1998	Steelhead	FS	Yakima River	Columbia River	48	F	92	4		N	3	EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	560	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	15972-60-8	Alachlor	340	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	834-12-8	Ametryn	94	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	1912-24-9	Atrazine	94	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	314-40-9	Bromacil	380	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	23184-66-9	Butachlor	560	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	2425-06-1	Captafol	240	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	786-19-6	Carbophenothion	94	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	380	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	13	ug/kg	J
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	380	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	56-72-4	Coumaphos	110	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	38	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	78-48-8	DEF	110	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	2303-16-4	Diallate-II	660	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	333-41-5	Diazinon	75	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	120-36-5	Dichlorprop	100	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	62-73-7	Dichlorvos	75	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	60-57-1	Dieldrin	7.3	ug/kg	NJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	957-51-7	Diphenamid	280	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	959-98-8	Endosulfan I	8.1	ug/kg	J
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	3.2	ug/kg	J
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	38	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	72-20-8	Endrin	38	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	38	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	38	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	2104-64-5	EPN	94	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	563-12-2	Ethion	66	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	13194-48-4	Ethoprop	75	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	94	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	60168-88-9	Fenarimol	280	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	66	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	55-38-9	Fenthion	66	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	380	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	944-22-9	Fonophos	56	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.4	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	732-11-6	Imidan	100	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	121-75-5	Malathion	75	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	150-50-5	Merphos	110	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	57837-19-1	Metaxyl			R
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	51218-45-2	Metholachlor	380	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	72-43-5	Methoxychlor	38	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	75	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	21087-64-9	Metribuzin	94	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	113-48-4	MGK-264	750	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	15299-99-7	Napropamide	280	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	380	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	56-38-2	Parathion	75	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	75	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	1114-71-2	Pebutate	190	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	34	ug/kg	J
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	298-02-2	Phorate	66	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	1610-18-0	Prometon	94	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	7287-19-6	Prometryne	94	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	380	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	139-40-2	Propazine	94	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	299-84-3	Ronnel	66	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	122-34-9	Simazine	94	ug/kg	UJ

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	3689-24-5	Sulfotep	56	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	35400-43-2	Sulprofos	66	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	5902-51-2	Terbacil	280	ug/kg	UJ
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	94	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	45	ug/kg	J
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	43121-43-3	Triademefon	240	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	2303-17-5	Triallate	280	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	1582-09-8	Trifluralin	140	ug/kg	U
98124160	3/12/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	9.4	EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	570	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	15972-60-8	Alachlor	340	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	834-12-8	Ametryn	95	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	1912-24-9	Atrazine	95	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	314-40-9	Bromacil	380	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	23184-66-9	Butachlor	570	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	786-19-6	Carbophenothion	95	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	380	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	14	ug/kg	J
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	380	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	56-72-4	Coumaphos	110	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	38	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	78-48-8	DEF	110	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	2303-16-4	Diallate-II	670	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	333-41-5	Diazinon	76	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	120-36-5	Dichloroprop	100	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	62-73-7	Dichlorvos	76	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	60-57-1	Dieldrin	7.6	ug/kg	NJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	957-51-7	Diphenamid	290	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	959-98-8	Endosulfan I	7.4	ug/kg	J
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	3	ug/kg	J
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	38	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	72-20-8	Endrin	38	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	38	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	38	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	2104-64-5	EPN	95	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	563-12-2	Ethion	67	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	13194-48-4	Ethoprop	76	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	95	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	60168-88-9	Fenarimol	290	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	67	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	55-38-9	Fenthion	67	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	380	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	944-22-9	Fonophos	57	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.5	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	732-11-6	Imidan	100	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	121-75-5	Malathion	76	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	150-50-5	Merphos	110	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	51218-45-2	Metholachlor	380	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	72-43-5	Methoxychlor	38	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	76	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	21087-64-9	Metribuzin	95	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	113-48-4	MGK-264	760	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	15299-99-7	Napropamide	290	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	380	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	56-38-2	Parathion	76	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	76	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	48	ug/kg	J
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	298-02-2	Phorate	67	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	1610-18-0	Prometon	95	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	7287-19-6	Prometryne	95	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	380	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	139-40-2	Propazine	95	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	299-84-3	Ronnel	67	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	122-34-9	Simazine	95	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	3689-24-5	Sulfotep	57	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	35400-43-2	Sulprofos	67	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	5902-51-2	Terbacil	290	ug/kg	UJ
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	95	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	55	ug/kg	J
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	43121-43-3	Triadefon	250	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	2303-17-5	Triallate	290	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	1582-09-8	Trifluralin	140	ug/kg	U
98124161	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	8.1	EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	540	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	15972-60-8	Alachlor	320	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	834-12-8	Ametryn	89	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	1912-24-9	Atrazine	89	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	140	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	140	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	1861-40-1	Benefin	130	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	180	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	314-40-9	Bromacil	360	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	23184-66-9	Butachlor	540	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	2008-41-5	Butylate	180	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	2425-06-1	Captafol	230	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	786-19-6	Carbophenothion	89	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	360	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	13	ug/kg	J
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	360	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	56-72-4	Coumaphos	110	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	21725-46-2	Cyanazine	130	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	1134-23-2	Cycloate	180	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	1897-45-6	Daconil	210	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	36	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	78-48-8	DEF	110	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	2303-16-4	Diallate-II	630	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	333-41-5	Diazinon	72	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	180	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	120-36-5	Dichloroprop	98	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	62-73-7	Dichlorvos	72	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	60-57-1	Dieldrin	5.5	ug/kg	NJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	78-34-2	Dioxathion	150	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	957-51-7	Diphenamid	270	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	330-54-1	Diuron	180	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	959-98-8	Endosulfan I	7.2	ug/kg	J
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	3.8	ug/kg	J
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	36	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	72-20-8	Endrin	36	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	36	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	36	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	2104-64-5	EPN	89	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	759-94-4	Eptam	180	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	130	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	563-12-2	Ethion	63	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	13194-48-4	Ethoprop	72	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	89	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	60168-88-9	Fenarimol	270	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	63	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	55-38-9	Fenthion	63	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	360	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	944-22-9	Fonophos	54	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	961-11-5	Gardona	180	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	8.9	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	732-11-6	Imidan	98	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	115-32-2	Kelthane	180	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	121-75-5	Malathion	72	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	150-50-5	Merphos	110	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	51218-45-2	Metholachlor	360	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	72-43-5	Methoxychlor	36	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	72	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	160	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	21087-64-9	Metribuzin	89	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	7786-34-7	Mevinphos	180	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	113-48-4	MGK-264	720	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	2212-67-1	Molinate	180	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	15299-99-7	Napropamide	270	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	27314-13-2	Norflurazon	180	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	360	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	56-38-2	Parathion	72	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	72	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	1114-71-2	Pebutate	180	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	130	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	31	ug/kg	J
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	298-02-2	Phorate	63	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	26399-36-0	Profluralin	210	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	1610-18-0	Prometon	89	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	7287-19-6	Prometryne	89	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	360	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	210	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	2312-35-8	Propargite	180	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	139-40-2	Propazine	89	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	31218-83-4	Propetamphos	180	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	299-84-3	Ronnel	63	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	122-34-9	Simazine	89	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	3689-24-5	Sulfotep	54	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	35400-43-2	Sulprofos	63	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	5902-51-2	Terbacil	270	ug/kg	UJ
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	89	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	30	ug/kg	J
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	43121-43-3	Triademefon	230	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	2303-17-5	Triallate	270	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	1582-09-8	Trifluralin	130	ug/kg	U
98124162	3/24/1998	Mountain Whitefish	WB	Yakima River	Columbia River	48	F	93	10		N	10.4	EPA 8085	AED-Pest	1929-77-7	Vernolate	180	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	560	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	15972-60-8	Alachlor	340	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	834-12-8	Ametryn	93	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	1912-24-9	Atrazine	93	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	314-40-9	Bromacil	370	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	23184-66-9	Butachlor	560	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	2425-06-1	Captafol	240	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	786-19-6	Carbophenothion	93	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	370	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	21	ug/kg	J
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	370	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	56-72-4	Coumaphos	110	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	1897-45-6	Daconil	220	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	37	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	78-48-8	DEF	110	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	2303-16-4	Diallate-II	650	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	333-41-5	Diazinon	75	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	120-36-5	Dichloroprop	100	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	62-73-7	Dichlorvos	75	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	60-57-1	Dieldrin	37	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	957-51-7	Diphenamid	280	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	959-98-8	Endosulfan I	9.5	ug/kg	J
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	4.1	ug/kg	J
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	37	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	72-20-8	Endrin	37	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	37	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	37	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	2104-64-5	EPN	93	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	563-12-2	Ethion	65	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	13194-48-4	Ethoprop	75	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	93	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	60168-88-9	Fenarimol	280	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	65	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	115-90-5	Fensulfothion			R
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	55-38-9	Fenthion	65	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	370	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	944-22-9	Fonophos	56	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.3	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	732-11-6	Imidan	100	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	121-75-5	Malathion	75	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	150-50-5	Merphos	110	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	51218-45-2	Metholachlor	370	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	72-43-5	Methoxychlor	37	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	75	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	21087-64-9	Metribuzin	93	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	113-48-4	MGK-264	750	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	15299-99-7	Napropamide	280	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	370	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	56-38-2	Parathion	75	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	75	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	41	ug/kg	J
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	298-02-2	Phorate	65	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	26399-36-0	Profluralin	220	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	1610-18-0	Prometon	93	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	7287-19-6	Prometryne	93	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	370	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	220	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	139-40-2	Propazine	93	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	299-84-3	Ronnel	65	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	122-34-9	Simazine	93	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	3689-24-5	Sulfotep	56	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	35400-43-2	Sulprofos	65	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	5902-51-2	Terbacil	280	ug/kg	UJ
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	93	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	39	ug/kg	J
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	43121-43-3	Triademefon	240	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	2303-17-5	Triallate	280	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	1582-09-8	Trifluralin	140	ug/kg	U
98124165	3/24/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.4	EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	580	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	15972-60-8	Alachlor	350	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	834-12-8	Ametryn	96	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	1912-24-9	Atrazine	96	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	314-40-9	Bromacil	380	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	23184-66-9	Butachlor	580	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	786-19-6	Carbophenothion	96	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	380	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	15	ug/kg	J
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	380	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	38	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	2303-16-4	Diallate-II	670	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	333-41-5	Diazinon	77	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	62-73-7	Dichlorvos	77	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	60-57-1	Dieldrin	38	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	957-51-7	Diphenamid	290	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	298-04-4	Dilsulfoton			R
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	959-98-8	Endosulfan I	7.7	ug/kg	J
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	2.9	ug/kg	J
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	38	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	72-20-8	Endrin	38	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	38	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	38	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	2104-64-5	EPN	96	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	563-12-2	Ethion	67	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	13194-48-4	Ethoprop	77	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	96	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	60168-88-9	Fenarimol	290	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	67	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	55-38-9	Fenthion	67	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	380	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	944-22-9	Fonophos	58	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.6	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	121-75-5	Malathion	77	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	150-50-5	Mephos	120	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	51218-45-2	Metholachlor	380	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	72-43-5	Methoxychlor	38	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	77	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	21087-64-9	Metribuzin	96	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	113-48-4	MGK-264	770	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	15299-99-7	Napropamide	290	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	380	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	56-38-2	Parathion	77	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	77	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	19	ug/kg	J
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	298-02-2	Phorate	67	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	1610-18-0	Prometon	96	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	7287-19-6	Prometryne	96	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	380	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	139-40-2	Propazine	96	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	299-84-3	Ronnel	67	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	122-34-9	Simazine	96	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	3689-24-5	Sulfotep	58	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	35400-43-2	Sulprofos	67	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	5902-51-2	Terbacil	290	ug/kg	UJ
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	96	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	29	ug/kg	J
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	2303-17-5	Triallate	290	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	1582-09-8	Trifluralin	140	ug/kg	U
98124166	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	7.7	EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	540	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	15972-60-8	Alachlor	330	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	834-12-8	Ametryn	91	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	1912-24-9	Atrazine	91	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	180	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	314-40-9	Bromacil	360	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	23184-66-9	Butachlor	540	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	2008-41-5	Butylate	180	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	2425-06-1	Captafol	240	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	786-19-6	Carbophenothion	91	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	360	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	30	ug/kg	J
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	360	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	56-72-4	Coumaphos	110	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	1134-23-2	Cycloate	180	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	1897-45-6	Daconil	220	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	36	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	78-48-8	DEF	110	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	2303-16-4	Diallate-II	630	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	333-41-5	Diazinon	73	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	180	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	120-36-5	Dichloroprop	100	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	62-73-7	Dichlorvos	73	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	60-57-1	Dieldrin	6	ug/kg	NJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	78-34-2	Dioxathion	150	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	957-51-7	Diphenamid	270	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	330-54-1	Diuron	180	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	959-98-8	Endosulfan I	10	ug/kg	J
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	4.5	ug/kg	J
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	36	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	72-20-8	Endrin	36	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	36	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	36	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	2104-64-5	EPN	91	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	759-94-4	Eptam	180	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	563-12-2	Ethion	63	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	13194-48-4	Ethoprop	73	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	91	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	60168-88-9	Fenarimol	270	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	63	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	55-38-9	Fenthion	63	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	360	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	944-22-9	Fonophos	54	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	961-11-5	Gardona	180	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.1	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	732-11-6	Imidan	100	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	115-32-2	Kelthane	180	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	121-75-5	Malathion	73	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	150-50-5	Merphos	110	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	51218-45-2	Metholachlor	360	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	72-43-5	Methoxychlor	36	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	73	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	160	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	21087-64-9	Metribuzin	91	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	7786-34-7	Mevinphos	180	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	113-48-4	MGK-264	730	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	2212-67-1	Molinate	180	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	15299-99-7	Napropamide	270	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	27314-13-2	Norflurazon	180	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	360	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	56-38-2	Parathion	73	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	73	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	1114-71-2	Pebulate	180	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	55	ug/kg	J
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	298-02-2	Phorate	63	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	26399-36-0	Profluralin	220	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	1610-18-0	Prometon	91	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	7287-19-6	Prometryne	91	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	360	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	220	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	2312-35-8	Propargite	180	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	139-40-2	Propazine	91	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	31218-83-4	Propetamphos	180	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	299-84-3	Ronnel	63	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	122-34-9	Simazine	91	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	3689-24-5	Sulfotep	54	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	35400-43-2	Sulprofos	63	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	5902-51-2	Terbacil	270	ug/kg	UJ
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	91	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	66	ug/kg	J
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	43121-43-3	Triadefon	240	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	2303-17-5	Triallate	270	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	1582-09-8	Trifluralin	140	ug/kg	U
98124167	3/31/1998	Mountain Whitefish	FS	Yakima River	Columbia River	48	F	94	10		N	8.6	EPA 8085	AED-Pest	1929-77-7	Vernolate	180	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	480	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	15972-60-8	Alachlor	290	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	834-12-8	Ametryn	79	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	1912-24-9	Atrazine	79	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	130	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	130	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	1861-40-1	Benefin	120	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	160	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	314-40-9	Bromacil	320	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	23184-66-9	Butachlor	480	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	2008-41-5	Butylate	160	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	2425-06-1	Captafol	210	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	133-06-2	Captan	110	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	786-19-6	Carbophenothion	79	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	320	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	4.6	ug/kg	J
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	320	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	56-72-4	Coumaphos	95	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	21725-46-2	Cyanazine	120	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	1134-23-2	Dacloate	160	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	1897-45-6	Daconil	190	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	32	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	78-48-8	DEF	95	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	2303-16-4	Diallate-II	550	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	333-41-5	Diazinon	63	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	160	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	120-36-5	Dichloroprop	87	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	62-73-7	Dichlorvos	63	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	60-57-1	Dieldrin	32	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	78-34-2	Dioxathion	130	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	957-51-7	Diphenamid	240	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	330-54-1	Diuron	160	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	959-98-8	Endosulfan I	32	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	32	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	32	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	72-20-8	Endrin	32	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	32	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	32	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	2104-64-5	EPN	79	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	759-94-4	Eptam	160	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	120	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	563-12-2	Ethion	55	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	13194-48-4	Ethoprop	63	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	79	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	60168-88-9	Fenarimol	240	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	55	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	55-38-9	Fenthion	55	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	320	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	944-22-9	Fonophos	48	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	961-11-5	Gardona	160	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	732-11-6	Imidan	87	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	115-32-2	Kelthane	160	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	121-75-5	Malathion	63	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	150-50-5	Merphos	95	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	51218-45-2	Metholachlor	320	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	72-43-5	Methoxychlor	32	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	63	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	140	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	21087-64-9	Metribuzin	79	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	7786-34-7	Mevinphos	160	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	113-48-4	MGK-264	630	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	2212-67-1	Molinate	160	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	15299-99-7	Napropamide	240	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	27314-13-2	Norflurazon	160	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	320	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	56-38-2	Parathion	63	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	63	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	1114-71-2	Pebulate	160	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	120	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	298-02-2	Phorate	55	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	26399-36-0	Profluralin	190	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	1610-18-0	Prometon	79	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	7287-19-6	Prometryne	79	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	320	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	190	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	2312-35-8	Propargite	160	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	139-40-2	Propazine	79	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	31218-83-4	Propetamphos	160	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	299-84-3	Ronnel	55	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	122-34-9	Simazine	79	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	3689-24-5	Sulfotep	48	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	35400-43-2	Sulprofos	55	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	5902-51-2	Terbacil	240	ug/kg	UJ
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	79	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	43121-43-3	Triademefon	210	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	2303-17-5	Triallate	240	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	1582-09-8	Trifluralin	120	ug/kg	U
98144103	4/1/1998	Steelhead	FS	Hood River	Columbia River	25		96	4		N	1.6	EPA 8085	AED-Pest	1929-77-7	Vernolate	160	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	580	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	15972-60-8	Alachlor	350	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	834-12-8	Ametryn	97	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	1912-24-9	Atrazine	47	ug/kg	NJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	314-40-9	Bromacil	390	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	23184-66-9	Butachlor	580	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	786-19-6	Carbophenothion	97	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	390	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	78	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	390	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	39	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	2303-16-4	Diallate-II	680	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	333-41-5	Diazinon	78	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	62-73-7	Dichlorvos	78	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	60-57-1	Dieldrin	4.1	ug/kg	NJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	957-51-7	Diphenamid	290	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	959-98-8	Endosulfan I	2.5	ug/kg	J
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	39	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	39	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	72-20-8	Endrin	39	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	39	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	39	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	2104-64-5	EPN	97	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	563-12-2	Ethion	68	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	13194-48-4	Ethoprop	78	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	97	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	60168-88-9	Fenarimol	290	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	68	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	55-38-9	Fenthion	68	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	390	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	944-22-9	Fonophos	58	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	3.4	ug/kg	J
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	121-75-5	Malathion	78	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	51218-45-2	Metholachlor	390	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	72-43-5	Methoxychlor	39	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	78	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	21087-64-9	Metribuzin	97	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	113-48-4	MGK-264	780	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	15299-99-7	Napropamide	290	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	390	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	56-38-2	Parathion	78	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	78	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	8.8	ug/kg	J
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	298-02-2	Phorate	68	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	1610-18-0	Prometon	97	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	7287-19-6	Prometryne	97	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	390	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	139-40-2	Propazine	97	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	299-84-3	Ronnel	68	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	122-34-9	Simazine	97	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	3689-24-5	Sulfotep	58	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	35400-43-2	Sulprofos	68	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	5902-51-2	Terbacil	290	ug/kg	UJ
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	97	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	66	ug/kg	J
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	2303-17-5	Triallate	290	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
98164077	4/16/1998	Largescale Sucker	WB	Yakima River	Columbia River	48	J	97	6		N	4.2	EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	600	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	15972-60-8	Alachlor	360	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	834-12-8	Ametryn	100	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	1912-24-9	Atrazine	100	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	200	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	314-40-9	Bromacil	400	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	23184-66-9	Butachlor	600	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	2008-41-5	Butylate	200	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	2425-06-1	Captafol	260	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	786-19-6	Carbophenothion	100	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	400	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	7.8	ug/kg	J
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	400	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	1134-23-2	Cycloate	200	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	1897-45-6	Daconil	240	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	40	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	2303-16-4	Diallate-II	700	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	333-41-5	Diazinon	80	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	200	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	120-36-5	Dichloroprop	110	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	62-73-7	Dichlorvos	80	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	60-57-1	Dieldrin	5.2	ug/kg	NJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	60-51-5	Dimethoate	80	ug/kg	R
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	957-51-7	Diphenamid	300	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	330-54-1	Diuron	200	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	959-98-8	Endosulfan I	1.2	ug/kg	NJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	40	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	40	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	72-20-8	Endrin	40	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	40	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	40	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	2104-64-5	EPN	100	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	759-94-4	Eptam	200	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	563-12-2	Ethion	70	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	13194-48-4	Ethoprop	80	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	100	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	60168-88-9	Fenarimol	300	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	70	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	55-38-9	Fenthion	70	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	400	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	944-22-9	Fonophos	60	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	961-11-5	Gardona	200	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	10	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	115-32-2	Kelthane	200	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	121-75-5	Malathion	80	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	51218-45-2	Metholachlor	400	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	72-43-5	Methoxychlor	40	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	80	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	21087-64-9	Metribuzin	100	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	7786-34-7	Mevinphos	200	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	113-48-4	MGK-264	800	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	2212-67-1	Molinate	200	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	15299-99-7	Napropamide	300	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	27314-13-2	Norflurazon	200	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	400	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	56-38-2	Parathion	80	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	80	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	1114-71-2	Pebulate	200	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	4.3	ug/kg	J
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	298-02-2	Phorate	70	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	26399-36-0	Profluralin	240	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	1610-18-0	Prometon	100	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	7287-19-6	Prometryne	100	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	400	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	240	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	2312-35-8	Propargite	200	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	139-40-2	Propazine	100	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	31218-83-4	Propetamphos	200	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	299-84-3	Ronnel	70	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	122-34-9	Simazine	100	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	3689-24-5	Sulfotep	60	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	35400-43-2	Sulprofos	70	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	5902-51-2	Terbacil	300	ug/kg	UJ
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	100	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	29	ug/kg	J
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	43121-43-3	Triademefon	260	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	2303-17-5	Triallate	300	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
98164078	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	J	98	6		N	2.8	EPA 8085	AED-Pest	1929-77-7	Vernolate	200	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	590	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	15972-60-8	Alachlor	360	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	834-12-8	Ametryn	99	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	1912-24-9	Atrazine	99	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	200	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	314-40-9	Bromacil	400	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	23184-66-9	Butachlor	590	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	2008-41-5	Butylate	200	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	2425-06-1	Captafol	260	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	786-19-6	Carbophenothion	99	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	400	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	5.1	ug/kg	J
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	400	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	1134-23-2	Cycloate	200	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	1897-45-6	Daconil	240	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	40	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	2303-16-4	Diallate-II	690	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	333-41-5	Diazinon	79	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	200	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	120-36-5	Dichloroprop	110	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	62-73-7	Dichlorvos	79	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	60-57-1	Dieldrin	4.6	ug/kg	NJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	957-51-7	Diphenamid	300	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	330-54-1	Diuron	200	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	959-98-8	Endosulfan I	1.5	ug/kg	J
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	40	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	40	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	72-20-8	Endrin	40	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	40	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	40	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	2104-64-5	EPN	99	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	759-94-4	Eptam	200	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	563-12-2	Ethion	69	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	13194-48-4	Ethoprop	79	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	99	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	60168-88-9	Fenarimol	300	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	69	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	55-38-9	Fenthion	69	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	400	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	944-22-9	Fonophos	59	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	961-11-5	Gardona	200	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	2.4	ug/kg	J
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	115-32-2	Kelthane	200	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	121-75-5	Malathion	79	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	51218-45-2	Metholachlor	400	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	72-43-5	Methoxychlor	40	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	79	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	21087-64-9	Metribuzin	99	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	7786-34-7	Mevinphos	200	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	113-48-4	MGK-264	790	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	2212-67-1	Molinate	200	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	15299-99-7	Napropamide	300	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	27314-13-2	Norflurazon	200	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	400	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	56-38-2	Parathion	79	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	79	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	1114-71-2	Pebulate	200	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	5.7	ug/kg	J
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	298-02-2	Phorate	69	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	26399-36-0	Profluralin	240	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	1610-18-0	Prometon	99	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	7287-19-6	Prometryne	99	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	400	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	240	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	2312-35-8	Propargite	200	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	139-40-2	Propazine	99	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	31218-83-4	Propetamphos	200	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	299-84-3	Ronnel	69	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	122-34-9	Simazine	99	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	3689-24-5	Sulfotep	59	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	35400-43-2	Sulprofos	69	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	5902-51-2	Terbacil	300	ug/kg	UJ
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	99	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	33	ug/kg	J
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	43121-43-3	Triademefon	260	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	2303-17-5	Triallate	300	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
98164079	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	2.1	EPA 8085	AED-Pest	1929-77-7	Vernolate	200	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	590	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	15972-60-8	Alachlor	350	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	834-12-8	Ametryn	98	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	1912-24-9	Atrazine	98	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	200	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	314-40-9	Bromacil	390	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	23184-66-9	Butachlor	590	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	2008-41-5	Butylate	200	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	786-19-6	Carbophenothion	98	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	390	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	78	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	390	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	1134-23-2	Cycloate	200	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	1897-45-6	Daconil	240	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	39	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	2303-16-4	Diallate-II	690	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	333-41-5	Diazinon	78	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	200	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	62-73-7	Dichlorvos	78	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	60-57-1	Dieldrin	5.1	ug/kg	J
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	957-51-7	Diphenamid	290	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	330-54-1	Diuron	200	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	18	ug/kg	J
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	1.2	ug/kg	NJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	0.53	ug/kg	NJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	72-20-8	Endrin	39	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	39	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	39	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	2104-64-5	EPN	98	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	759-94-4	Eptam	200	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	563-12-2	Ethion	69	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	78	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	98	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	290	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	69	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	55-38-9	Fenthion	69	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	390	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	944-22-9	Fonophos	59	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	961-11-5	Gardona	200	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	2.2	ug/kg	J
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	115-32-2	Kelthane	200	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	121-75-5	Malathion	78	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	390	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	39	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	78	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	98	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	7786-34-7	Mevinphos	200	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	113-48-4	MGK-264	780	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	2212-67-1	Molinate	200	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	15299-99-7	Napropamide	290	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	27314-13-2	Norflurazon	200	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	390	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	56-38-2	Parathion	78	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	78	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	1114-71-2	Pebulate	200	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	5.3	ug/kg	J
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	298-02-2	Phorate	69	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	26399-36-0	Profluralin	240	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	1610-18-0	Prometon	98	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	7287-19-6	Prometryne	98	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	390	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	240	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	2312-35-8	Propargite	200	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	139-40-2	Propazine	98	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	200	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	299-84-3	Ronnel	69	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	122-34-9	Simazine	98	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	59	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	35400-43-2	Sulprofos	69	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	5902-51-2	Terbacil	290	ug/kg	UJ
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	98	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	24	ug/kg	J
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	2303-17-5	Triallate	290	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
98164080	4/16/1998	Largescale Sucker	FS	Yakima River	Columbia River	48	I	98	6		N	3.5	EPA 8085	AED-Pest	1929-77-7	Vernolate	200	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	540	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	15972-60-8	Alachlor	330	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	834-12-8	Ametryn	91	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1610-17-9	Atraton			R
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1912-24-9	Atrazine	91	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	180	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	314-40-9	Bromacil	360	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	23184-66-9	Butachlor	540	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	2008-41-5	Butylate	180	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	2425-06-1	Captafol	240	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	786-19-6	Carbophenothion	91	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	360	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	8.7	ug/kg	J
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	360	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	56-72-4	Coumaphos	110	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1134-23-2	Cycloate	180	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1897-45-6	Daconil	220	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	36	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	78-48-8	DEF	110	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	2303-16-4	Diallate-II	640	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	333-41-5	Diazinon	73	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	180	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	120-36-5	Dichloroprop	100	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	62-73-7	Dichlorvos	73	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	60-57-1	Dieldrin	9.6	ug/kg	
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	78-34-2	Dioxathion	150	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	957-51-7	Diphenamid	270	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	330-54-1	Diuron	180	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	959-98-8	Endosulfan I	36	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	33213-65-9	Endosulfan II	36	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	36	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	72-20-8	Endrin	36	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	36	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	36	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	2104-64-5	EPN	91	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	759-94-4	Eptam	180	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	563-12-2	Ethion	64	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	13194-48-4	Ethoprop	73	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	22224-92-6	Fenamiphos	91	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	60168-88-9	Fenarimol	270	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	64	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	55-38-9	Fenthion	64	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	360	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	944-22-9	Fonophos	54	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	961-11-5	Gardona	180	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.1	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	732-11-6	Imidan	100	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	115-32-2	Kelthane	180	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	121-75-5	Malathion	73	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	150-50-5	Merphos	110	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	51218-45-2	Metholachlor	360	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	72-43-5	Methoxychlor	36	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	73	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	*311455	Methyl Paraoxon	160	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	21087-64-9	Metribuzin	91	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	7786-34-7	Mevinphos	180	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	113-48-4	MGK-264	730	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	2212-67-1	Molinate	180	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	15299-99-7	Napropamide	270	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	27314-13-2	Norflurazon	180	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	360	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	56-38-2	Parathion	73	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	298-00-0	Parathion-methyl	73	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1114-71-2	Pebulate	180	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	6.7	ug/kg	J
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	298-02-2	Phorate	64	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	26399-36-0	Profluralin	220	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1610-18-0	Prometon	91	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	7287-19-6	Prometryne	91	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	360	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	220	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	2312-35-8	Propargite	180	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	139-40-2	Propazine	91	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	31218-83-4	Propetamphos	180	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	299-84-3	Ronnel	64	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	122-34-9	Simazine	91	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	3689-24-5	Sulfotep	54	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	35400-43-2	Sulprofos	64	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	5902-51-2	Terbacil	270	ug/kg	UJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	91	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	20	ug/kg	J
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	43121-43-3	Triadamefon	240	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	2303-17-5	Triallate	270	ug/kg	U
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1582-09-8	Trifluralin	7.4	ug/kg	NJ
98174080	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1929-77-7	Vernolate	180	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	680	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	15972-60-8	Alachlor	410	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	834-12-8	Ametryn	110	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1610-17-9	Atraton			R
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1912-24-9	Atrazine	110	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	180	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	180	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1861-40-1	Benefin	170	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	230	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	314-40-9	Bromacil	460	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	23184-66-9	Butachlor	680	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	2008-41-5	Butylate	230	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	2425-06-1	Captafol	300	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	133-06-2	Captan	160	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	786-19-6	Carbophenothion	110	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	460	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	11	ug/kg	J
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	460	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	56-72-4	Coumaphos	140	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	21725-46-2	Cyanazine	170	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1134-23-2	Cycloate	230	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1897-45-6	Daconil	270	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	46	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	78-48-8	DEF	140	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	2303-16-4	Diallate-II	800	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	333-41-5	Diazinon	91	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	230	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	120-36-5	Dichlorprop	130	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	62-73-7	Dichlorvos	91	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	60-57-1	Dieldrin	8.2	ug/kg	J
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	78-34-2	Dioxathion	190	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	957-51-7	Diphenamid	340	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	330-54-1	Diuron	230	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	959-98-8	Endosulfan I	46	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	33213-65-9	Endosulfan II	46	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	46	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	72-20-8	Endrin	46	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	46	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	46	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	2104-64-5	EPN	110	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	759-94-4	Eptam	230	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	170	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	563-12-2	Ethion	80	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	13194-48-4	Ethoprop	91	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	22224-92-6	Fenamiphos	110	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	60168-88-9	Fenarimol	340	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	80	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	55-38-9	Fenthion	80	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	460	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	944-22-9	Fonophos	68	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	961-11-5	Gardona	230	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	732-11-6	Imidan	130	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	115-32-2	Kelthane	230	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	121-75-5	Malathion	91	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	150-50-5	Merphos	140	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	51218-45-2	Metholachlor	460	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	72-43-5	Methoxychlor	46	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	91	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	*311455	Methyl Paraoxon	200	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	21087-64-9	Metribuzin	110	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	7786-34-7	Mevinphos	230	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	113-48-4	MGK-264	910	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	2212-67-1	Molinate	230	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	15299-99-7	Napropamide	340	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	27314-13-2	Norflurazon	230	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	460	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	56-38-2	Parathion	91	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	298-00-0	Parathion-methyl	91	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1114-71-2	Pebulate	230	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	40487-42-1	Pendimethalin	170	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	298-02-2	Phorate	80	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	26399-36-0	Profluralin	270	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1610-18-0	Prometon	110	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	7287-19-6	Prometryne	110	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	460	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	270	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	2312-35-8	Propargite	230	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	139-40-2	Propazine	110	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	31218-83-4	Propetamphos	230	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	299-84-3	Ronnel	80	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	122-34-9	Simazine	110	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	3689-24-5	Sulfotep	68	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	35400-43-2	Sulprofos	80	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	5902-51-2	Terbacil	340	ug/kg	UJ
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	110	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	43121-43-3	Triademefon	300	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	2303-17-5	Triallate	340	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1582-09-8	Trifluralin	170	ug/kg	U
98174081	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	C	99	3		N		EPA 8085	AED-Pest	1929-77-7	Vernolate	230	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	590	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	15972-60-8	Alachlor	360	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	834-12-8	Ametryn	99	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	1610-17-9	Atraton			R
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	1912-24-9	Atrazine	99	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	200	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	314-40-9	Bromacil	390	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	23184-66-9	Butachlor	590	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	2008-41-5	Butylate	200	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	2425-06-1	Captafol	260	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	786-19-6	Carbophenothion	99	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	390	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	22	ug/kg	J
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	390	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	1134-23-2	Cycloate	200	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	1897-45-6	Daconil	240	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	39	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	2303-16-4	Diallate-II	690	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	333-41-5	Diazinon	79	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	200	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	62-73-7	Dichlorvos	79	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	60-57-1	Dieldrin	18	ug/kg	
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	957-51-7	Diphenamid	300	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	330-54-1	Diuron	200	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	959-98-8	Endosulfan I	39	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	33213-65-9	Endosulfan II	39	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	2.6	ug/kg	NJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	72-20-8	Endrin	39	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	39	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	39	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	2104-64-5	EPN	99	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	759-94-4	Eptam	200	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	563-12-2	Ethion	69	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	13194-48-4	Ethoprop	79	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	22224-92-6	Fenamiphos	99	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	60168-88-9	Fenarimol	300	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	69	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	55-38-9	Fenthion	69	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	390	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	59756-60-4	Fluridone			R

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	944-22-9	Fonophos	59	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	961-11-5	Gardona	200	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	2.4	ug/kg	J
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	115-32-2	Kelthane	200	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	121-75-5	Malathion	79	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	51218-45-2	Metholachlor	390	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	72-43-5	Methoxychlor	39	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	79	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	21087-64-9	Metribuzin	99	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	7786-34-7	Mevinphos	200	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	113-48-4	MGK-264	790	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	2212-67-1	Molinate	200	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	15299-99-7	Napropamide	300	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	27314-13-2	Norflurazon	200	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	390	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	56-38-2	Parathion	79	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	298-00-0	Parathion-methyl	79	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	1114-71-2	Pebulate	200	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	8.1	ug/kg	J
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	298-02-2	Phorate	69	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	26399-36-0	Profluralin	240	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	1610-18-0	Prometon	99	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	7287-19-6	Prometryne	99	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	390	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	240	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	2312-35-8	Propargite	320	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	139-40-2	Propazine	99	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	31218-83-4	Propetamphos	200	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	299-84-3	Ronnel	69	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	122-34-9	Simazine	99	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	3689-24-5	Sulfotep	59	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	35400-43-2	Sulprofos	69	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	5902-51-2	Terbacil	300	ug/kg	UJ
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	99	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	18	ug/kg	J
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	43121-43-3	Triademefon	260	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	2303-17-5	Triallate	300	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
98174082	4/24/1998	Smallmouth Bass	FS	Yakima River	Columbia River	48	B	99	3		N		EPA 8085	AED-Pest	1929-77-7	Vernolate	200	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	550	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	15972-60-8	Alachlor	330	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	834-12-8	Ametryn	91	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	1610-17-9	Atraton			R
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	1912-24-9	Atrazine	91	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	180	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	314-40-9	Bromacil	360	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	23184-66-9	Butachlor	550	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	2008-41-5	Butylate	180	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	2425-06-1	Captafol	240	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	786-19-6	Carbophenothion	91	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	360	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	27	ug/kg	J
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	360	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	56-72-4	Coumaphos	110	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	1134-23-2	Cycloate	180	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	1897-45-6	Daconil	220	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	36	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	78-48-8	DEF	110	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	2303-16-4	Diallate-II	640	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	333-41-5	Diazinon	73	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	180	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	120-36-5	Dichlorprop	100	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	62-73-7	Dichlorvos	73	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	60-57-1	Dieldrin	33	ug/kg	
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	78-34-2	Dioxathion	150	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	957-51-7	Diphenamid	270	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	330-54-1	Diuron	180	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	959-98-8	Endosulfan I	36	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	33213-65-9	Endosulfan II	36	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	36	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	72-20-8	Endrin	36	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	36	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	36	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	2104-64-5	EPN	91	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	759-94-4	Eptam	180	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	563-12-2	Ethion	64	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	13194-48-4	Ethoprop	73	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	22224-92-6	Fenamiphos	91	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	60168-88-9	Fenarimol	270	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	64	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	55-38-9	Fenthion	64	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	360	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	944-22-9	Fonophos	55	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	961-11-5	Gardona	180	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	7.7	ug/kg	J
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	732-11-6	Imidan	100	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	115-32-2	Kelthane	180	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	121-75-5	Malathion	73	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	150-50-5	Merphos	110	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	51218-45-2	Metholachlor	360	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	72-43-5	Methoxychlor	36	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	73	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	*311455	Methyl Paraoxon	160	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	21087-64-9	Metribuzin	91	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	7786-34-7	Mevinphos	180	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	113-48-4	MGK-264	730	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	2212-67-1	Molinate	180	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	15299-99-7	Napropamide	270	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	27314-13-2	Norflurazon	180	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	360	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	56-38-2	Parathion	73	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	298-00-0	Parathion-methyl	73	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	1114-71-2	Pebulate	180	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	19	ug/kg	J
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	298-02-2	Phorate	64	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	26399-36-0	Profluralin	220	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	1610-18-0	Prometon	91	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	7287-19-6	Prometryne	91	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	360	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	220	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	2312-35-8	Propargite	180	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	139-40-2	Propazine	91	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	31218-83-4	Propetamphos	180	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	299-84-3	Ronnel	64	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	122-34-9	Simazine	91	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	3689-24-5	Sulfotep	55	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	35400-43-2	Sulprofos	64	ug/kg	UJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	5902-51-2	Terbacil	270	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	91	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	57	ug/kg	J
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	43121-43-3	Triademefon	240	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	2303-17-5	Triallate	270	ug/kg	U
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	1582-09-8	Trifluralin	5.5	ug/kg	NJ
98174083	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	B	100	3		N		EPA 8085	AED-Pest	1929-77-7	Vernolate	180	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	600	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	15972-60-8	Alachlor	360	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	834-12-8	Ametryn	99	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	1610-17-9	Atraton			R
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	1912-24-9	Atrazine	99	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	200	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	314-40-9	Bromacil	400	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	23184-66-9	Butachlor	600	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	2008-41-5	Butylate	200	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	2425-06-1	Captafol	260	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	786-19-6	Carbophenothion	99	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	400	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	48	ug/kg	J
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	400	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	1134-23-2	Cycloate	200	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	1897-45-6	Daconil	240	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	40	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	2303-16-4	Diallate-II	690	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	333-41-5	Diazinon	79	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	200	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	62-73-7	Dichlorvos	79	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	60-57-1	Dieldrin	34	ug/kg	
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	957-51-7	Diphenamid	300	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	330-54-1	Diuron	200	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	959-98-8	Endosulfan I	40	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	33213-65-9	Endosulfan II	40	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	4.6	ug/kg	J
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	72-20-8	Endrin	40	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	40	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	40	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	2104-64-5	EPN	99	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	759-94-4	Eptam	200	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	563-12-2	Ethion	69	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	13194-48-4	Ethoprop	79	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	22224-92-6	Fenamiphos	99	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	60168-88-9	Fenarimol	300	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	69	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	55-38-9	Fenthion	69	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	400	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	944-22-9	Fonophos	60	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	961-11-5	Gardona	200	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	8.2	ug/kg	J
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	115-32-2	Kelthane	200	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	121-75-5	Malathion	79	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	51218-45-2	Metholachlor	400	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	72-43-5	Methoxychlor	40	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	79	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	21087-64-9	Metribuzin	99	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	7786-34-7	Mevinphos	200	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	113-48-4	MGK-264	790	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	2212-67-1	Molinate	200	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	15299-99-7	Napropamide	300	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	27314-13-2	Norflurazon	200	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	400	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	56-38-2	Parathion	79	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	298-00-0	Parathion-methyl	79	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	1114-71-2	Pebulate	200	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	20	ug/kg	J
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	298-02-2	Phorate	69	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	26399-36-0	Profluralin	240	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	1610-18-0	Prometon	99	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	7287-19-6	Prometryne	99	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	400	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	240	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	2312-35-8	Propargite	200	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	139-40-2	Propazine	99	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	31218-83-4	Propetamphos	200	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	299-84-3	Ronnel	69	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	122-34-9	Simazine	99	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	3689-24-5	Sulfotep	60	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	35400-43-2	Sulprofos	69	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	5902-51-2	Terbacil	300	ug/kg	UJ
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	99	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	64	ug/kg	J
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	43121-43-3	Triademefon	260	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	2303-17-5	Triallate	300	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
98174084	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	E	100	3		N		EPA 8085	AED-Pest	1929-77-7	Vernolate	200	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	590	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	15972-60-8	Alachlor	350	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	834-12-8	Ametryn	98	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	1610-17-9	Atraton			R
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	1912-24-9	Atrazine	98	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	200	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	314-40-9	Bromacil	390	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	23184-66-9	Butachlor	590	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	2008-41-5	Butylate	200	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	786-19-6	Carbophenothion	98	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	390	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	43	ug/kg	J
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	390	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	1134-23-2	Cycloate	200	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	39	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	2303-16-4	Diallate-II	680	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	333-41-5	Diazinon	78	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	200	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	62-73-7	Dichlorvos	78	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	60-57-1	Dieldrin	22	ug/kg	
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	957-51-7	Diphenamid	290	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	330-54-1	Diuron	200	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	959-98-8	Endosulfan I	39	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	33213-65-9	Endosulfan II	39	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	3.2	ug/kg	NJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	72-20-8	Endrin	39	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	39	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	39	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	2104-64-5	EPN	98	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	759-94-4	Eptam	200	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	563-12-2	Ethion	68	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	13194-48-4	Ethoprop	78	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	22224-92-6	Fenamiphos	98	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	60168-88-9	Fenarimol	290	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	68	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	55-38-9	Fenthion	68	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	390	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	944-22-9	Fonophos	59	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	961-11-5	Gardona	200	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	7.8	ug/kg	J
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	115-32-2	Kelthane	200	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	121-75-5	Malathion	78	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	51218-45-2	Metholachlor	390	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	72-43-5	Methoxychlor	39	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	78	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	21087-64-9	Metribuzin	98	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	7786-34-7	Mevinphos	200	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	113-48-4	MGK-264	780	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	2212-67-1	Molinate	200	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	15299-99-7	Napropamide	290	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	27314-13-2	Norflurazon	200	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	390	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	56-38-2	Parathion	78	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	298-00-0	Parathion-methyl	78	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	1114-71-2	Pebulate	200	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	28	ug/kg	J
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	298-02-2	Phorate	68	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	1610-18-0	Prometon	98	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	7287-19-6	Prometryne	98	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	390	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	2312-35-8	Propargite	200	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	139-40-2	Propazine	98	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	31218-83-4	Propetamphos	200	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	299-84-3	Ronnel	68	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	122-34-9	Simazine	98	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	3689-24-5	Sulfotep	59	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	35400-43-2	Sulprofos	68	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	5902-51-2	Terbacil	290	ug/kg	UJ
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	98	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	66	ug/kg	J
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	2303-17-5	Triallate	290	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
98174085	4/21/1998	Smallmouth Bass	WB	Yakima River	Columbia River	48	D	100	3		N		EPA 8085	AED-Pest	1929-77-7	Vernolate	200	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	590	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	15972-60-8	Alachlor	360	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	834-12-8	Ametryn	99	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	1610-17-9	Atraton			R

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	1912-24-9	Atrazine	99	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	200	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	314-40-9	Bromacil	400	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	23184-66-9	Butachlor	590	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	2008-41-5	Butylate	200	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	2425-06-1	Captafol	260	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	786-19-6	Carbophenothion	99	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	400	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	79	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	400	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	1134-23-2	Dacloate	200	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	1897-45-6	Daconil	240	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	40	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	2303-16-4	Diallate-II	690	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	333-41-5	Diazinon	79	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	200	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	62-73-7	Dichlorvos	79	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	60-57-1	Dieldrin	40	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	957-51-7	Diphenamid	300	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	330-54-1	Diuron	200	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	959-98-8	Endosulfan I	40	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	40	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	40	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	72-20-8	Endrin	40	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	40	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	40	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	2104-64-5	EPN	99	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	759-94-4	Eptam	200	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	563-12-2	Ethion	69	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	13194-48-4	Ethoprop	79	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	99	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	60168-88-9	Fenarimol	300	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	69	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	55-38-9	Fenthion	69	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	400	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	944-22-9	Fonophos	59	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	961-11-5	Gardona	200	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.9	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	115-32-2	Kelthane	200	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	121-75-5	Malathion	79	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	51218-45-2	Metholachlor	400	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	72-43-5	Methoxychlor	40	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	79	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	21087-64-9	Metribuzin	99	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	7786-34-7	Mevinphos	200	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	113-48-4	MGK-264	790	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	2212-67-1	Molinate	200	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	15299-99-7	Napropamide	300	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	27314-13-2	Norflurazon	200	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	400	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	56-38-2	Parathion	79	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	79	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	1114-71-2	Pebulate	200	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	420	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	9.9	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	298-02-2	Phorate	69	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	26399-36-0	Profluralin	240	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	1610-18-0	Prometon	99	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	7287-19-6	Prometryne	99	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	400	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	240	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	2312-35-8	Propargite	200	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	139-40-2	Propazine	99	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	31218-83-4	Propetamphos	200	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	299-84-3	Ronnel	69	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	122-34-9	Simazine	99	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	3689-24-5	Sulfotep	59	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	35400-43-2	Sulprofos	69	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	5902-51-2	Terbacil	300	ug/kg	UJ
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	99	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	unknown	Terabromodiphenyl ether	7.1	ug/kg	J
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	43121-43-3	Triademefon	260	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	2303-17-5	Triallate	300	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
98184125	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	5	EPA 8085	AED-Pest	1929-77-7	Vernolate	200	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	590	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	15972-60-8	Alachlor	360	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	834-12-8	Ametryn	99	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	1912-24-9	Atrazine	99	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	200	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	314-40-9	Bromacil	390	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	23184-66-9	Butachlor	590	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	2008-41-5	Butylate	200	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	2425-06-1	Captafol	260	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	786-19-6	Carbophenothion	99	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	390	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	79	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	390	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	1134-23-2	Cycloate	200	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	1897-45-6	Daconil	240	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	39	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	2303-16-4	Diallate-II	690	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	333-41-5	Diazinon	79	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	200	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	62-73-7	Dichlorvos	79	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	60-57-1	Dieldrin	39	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	957-51-7	Diphenamid	300	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	330-54-1	Diuron	200	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	959-98-8	Endosulfan I	39	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	39	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	39	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	72-20-8	Endrin	39	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	39	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	39	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	2104-64-5	EPN	99	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	759-94-4	Eptam	200	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	563-12-2	Ethion	69	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	13194-48-4	Ethoprop	79	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	99	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	60168-88-9	Fenarimol	300	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	69	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	55-38-9	Fenthion	69	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	390	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	944-22-9	Fonophos	59	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	961-11-5	Gardona	200	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	11	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	115-32-2	Kelthane	200	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	121-75-5	Malathion	79	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	51218-45-2	Metholachlor	390	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	72-43-5	Methoxychlor	39	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	79	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	21087-64-9	Metribuzin	99	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	7786-34-7	Mevinphos	200	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	113-48-4	MGK-264	790	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	2212-67-1	Molinate	200	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	15299-99-7	Napropamide	300	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	27314-13-2	Norflurazon	200	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	390	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	56-38-2	Parathion	79	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	79	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	1114-71-2	Pebulate	200	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	11	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	298-02-2	Phorate	69	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	26399-36-0	Profluralin	240	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	1610-18-0	Prometon	99	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	7287-19-6	Prometryne	99	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	390	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	240	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	2312-35-8	Propargite	200	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	139-40-2	Propazine	99	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	31218-83-4	Propetamphos	200	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	299-84-3	Ronnel	69	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	122-34-9	Simazine	99	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	3689-24-5	Sulfotep	59	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	35400-43-2	Sulprofos	69	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	5902-51-2	Terbacil	300	ug/kg	UJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	99	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	2.8	ug/kg	NJ
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	43121-43-3	Triademefon	260	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	2303-17-5	Triallate	300	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
98184126	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	E	101	6		N	2.7	EPA 8085	AED-Pest	1929-77-7	Vernolate	200	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	590	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	15972-60-8	Alachlor	350	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	834-12-8	Ametryn	98	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	1912-24-9	Atrazine	98	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	200	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	314-40-9	Bromacil	390	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	23184-66-9	Butachlor	590	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	2008-41-5	Butylate	200	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	786-19-6	Carbophenothion	98	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	390	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	78	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	390	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	1134-23-2	Cycloate	200	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	39	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	2303-16-4	Diallate-II	680	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	333-41-5	Diazinon	78	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	200	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	62-73-7	Dichlorvos	78	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	60-57-1	Dieldrin	39	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	957-51-7	Diphenamid	290	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	330-54-1	Diuron	200	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	959-98-8	Endosulfan I	39	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	39	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	39	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	72-20-8	Endrin	39	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	39	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	39	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	2104-64-5	EPN	98	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	759-94-4	Eptam	200	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	563-12-2	Ethion	68	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	13194-48-4	Ethoprop	78	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	98	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	60168-88-9	Fenarimol	290	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	68	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	55-38-9	Fenthion	68	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	390	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	944-22-9	Fonophos	59	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	961-11-5	Gardona	200	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.8	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	115-32-2	Kelthane	200	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	121-75-5	Malathion	78	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	51218-45-2	Metholachlor	390	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	72-43-5	Methoxychlor	39	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	78	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	21087-64-9	Metribuzin	98	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	7786-34-7	Mevinphos	200	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	113-48-4	MGK-264	780	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	2212-67-1	Molinate	200	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	15299-99-7	Napropamide	290	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	27314-13-2	Norflurazon	200	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	390	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	56-38-2	Parathion	78	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	78	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	1114-71-2	Pebulate	200	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	4.7	ug/kg	NJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	298-02-2	Phorate	68	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	1610-18-0	Prometon	98	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	7287-19-6	Prometryne	98	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	390	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	2312-35-8	Propargite	200	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	139-40-2	Propazine	98	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	31218-83-4	Propetamphos	200	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	299-84-3	Ronnel	68	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	122-34-9	Simazine	98	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	3689-24-5	Sulfotep	59	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	35400-43-2	Sulprofos	68	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	5902-51-2	Terbacil	290	ug/kg	UJ
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	98	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	7	ug/kg	J
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	2303-17-5	Triallate	290	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
98184127	4/28/1998	Largescale Sucker	WB	Snake River	Columbia River	13	C	101	6		N	3.6	EPA 8085	AED-Pest	1929-77-7	Vernolate	200	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	600	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	15972-60-8	Alachlor	360	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	834-12-8	Ametryn	100	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	1912-24-9	Atrazine	100	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	200	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	314-40-9	Bromacil	400	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	23184-66-9	Butachlor	600	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	2008-41-5	Butylate	200	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	2425-06-1	Captafol	260	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	786-19-6	Carbophenothion	100	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	400	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	80	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	400	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	1134-23-2	Cycloate	200	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	1897-45-6	Daconil	240	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	40	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	2303-16-4	Diallate-II	700	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	333-41-5	Diazinon	80	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	200	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	62-73-7	Dichlorvos	80	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	60-57-1	Dieldrin	40	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	957-51-7	Diphenamid	300	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	330-54-1	Diuron	200	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	959-98-8	Endosulfan I	40	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	40	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	40	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	72-20-8	Endrin	40	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	40	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	40	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	2104-64-5	EPN	100	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	759-94-4	Eptam	200	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	563-12-2	Ethion	70	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	13194-48-4	Ethoprop	80	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	100	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	60168-88-9	Fenarimol	300	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	70	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	55-38-9	Fenthion	70	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	400	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	944-22-9	Fonophos	60	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	961-11-5	Gardona	200	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	10	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	115-32-2	Kelthane	200	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	121-75-5	Malathion	80	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	51218-45-2	Metholachlor	400	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	72-43-5	Methoxychlor	40	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	80	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	21087-64-9	Metribuzin	100	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	7786-34-7	Mevinphos	200	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	113-48-4	MGK-264	800	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	2212-67-1	Molinate	200	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	15299-99-7	Napropamide	300	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	27314-13-2	Norflurazon	200	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	400	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	56-38-2	Parathion	80	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	80	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	1114-71-2	Pebulate	200	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	4	ug/kg	J
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	298-02-2	Phorate	70	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	26399-36-0	Profluralin	240	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	1610-18-0	Prometon	100	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	7287-19-6	Prometryne	100	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	400	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	240	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	2312-35-8	Propargite	200	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	139-40-2	Propazine	100	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	31218-83-4	Propetamphos	200	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	299-84-3	Ronnel	70	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	122-34-9	Simazine	100	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	3689-24-5	Sulfotep	60	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	35400-43-2	Sulprofos	70	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	5902-51-2	Terbacil	300	ug/kg	UJ
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	100	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	6.6	ug/kg	J
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	43121-43-3	Triademefon	260	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	2303-17-5	Triallate	300	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
98184128	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	C	102	6		N	2	EPA 8085	AED-Pest	1929-77-7	Vernolate	200	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	590	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	15972-60-8	Alachlor	350	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	834-12-8	Ametryn	98	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	1912-24-9	Atrazine	98	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	200	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	314-40-9	Bromacil	390	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	23184-66-9	Butachlor	590	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	2008-41-5	Butylate	200	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	786-19-6	Carbophenothion	98	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	390	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	78	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	390	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	1134-23-2	Cycloate	200	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	39	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	2303-16-4	Diallate-II	680	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	333-41-5	Diazinon	78	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	200	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	62-73-7	Dichlorvos	78	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	60-57-1	Dieldrin	39	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	957-51-7	Diphenamid	290	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	330-54-1	Diuron	200	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	959-98-8	Endosulfan I	39	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	39	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	39	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	72-20-8	Endrin	39	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	39	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	39	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	2104-64-5	EPN	98	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	759-94-4	Eptam	200	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	563-12-2	Ethion	68	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	13194-48-4	Ethoprop	78	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	98	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	60168-88-9	Fenarimol	290	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	68	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	55-38-9	Fenthion	68	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	390	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	944-22-9	Gonophos	59	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	961-11-5	Gardona	200	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.8	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	115-32-2	Kelthane	200	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	121-75-5	Malathion	78	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	51218-45-2	Metholachlor	390	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	72-43-5	Methoxychlor	39	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	78	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	21087-64-9	Metribuzin	98	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	7786-34-7	Mevinphos	200	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	113-48-4	MGK-264	780	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	2212-67-1	Molinate	200	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	15299-99-7	Napropamide	290	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	27314-13-2	Norflurazon	200	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	390	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	56-38-2	Parathion	78	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	78	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	1114-71-2	Pebulate	200	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	2.5	ug/kg	NJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	298-02-2	Phorate	68	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	1610-18-0	Prometon	98	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	7287-19-6	Prometryne	98	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	390	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	2312-35-8	Propargite	200	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	139-40-2	Propazine	98	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	31218-83-4	Propetamphos	200	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	299-84-3	Ronnel	68	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	122-34-9	Simazine	98	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	3689-24-5	Sulfotep	59	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	35400-43-2	Sulprofos	68	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	5902-51-2	Terbacil	290	ug/kg	UJ
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	98	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	5.5	ug/kg	J
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	2303-17-5	Triallate	290	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
98184129	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.7	EPA 8085	AED-Pest	1929-77-7	Vernolate	200	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	580	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	15972-60-8	Alachlor	350	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	834-12-8	Ametryn	96	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	1610-17-9	Atraton			R
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	1912-24-9	Atrazine	96	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	314-40-9	Bromacil	380	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	23184-66-9	Butachlor	580	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	786-19-6	Carbophenothion	96	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	380	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	77	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	380	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	38	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	2303-16-4	Diallate-II	670	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	333-41-5	Diazinon	77	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	62-73-7	Dichlorvos	77	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	60-57-1	Dieldrin	38	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	957-51-7	Diphenamid	290	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	959-98-8	Endosulfan I	38	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	33213-65-9	Endosulfan II	38	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	38	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	72-20-8	Endrin	38	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	38	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	38	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	2104-64-5	EPN	96	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	563-12-2	Ethion	67	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	13194-48-4	Ethoprop	77	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	22224-92-6	Fenamiphos	96	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	60168-88-9	Fenarimol	290	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	67	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	55-38-9	Fenthion	67	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	380	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	944-22-9	Fonophos	58	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	9.6	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	121-75-5	Malathion	77	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	51218-45-2	Metholachlor	380	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	72-43-5	Methoxychlor	38	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	77	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	21087-64-9	Metribuzin	96	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	113-48-4	MGK-264	770	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	15299-99-7	Napropamide	290	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	380	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	56-38-2	Parathion	77	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	298-00-0	Parathion-methyl	77	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	9.6	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	298-02-2	Phorate	67	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	1610-18-0	Prometon	96	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	7287-19-6	Prometryne	96	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	380	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	139-40-2	Propazine	96	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	299-84-3	Ronnel	67	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	122-34-9	Simazine	96	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	3689-24-5	Sulfotep	58	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	35400-43-2	Sulprofos	67	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	5902-51-2	Terbacil	290	ug/kg	UJ
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	96	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	4.3	ug/kg	J
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	2303-17-5	Triallate	290	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	1582-09-8	Trifluralin	140	ug/kg	U
98184130	4/28/1998	Largescale Sucker	FS	Snake River	Columbia River	13	D	102	6		N	1.4	EPA 8085	AED-Pest	1929-77-7	Veronolate	190	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	570	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	15972-60-8	Alachlor	340	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	834-12-8	Ametryn	96	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1610-17-9	Atraton			R
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1912-24-9	Atrazine	96	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	314-40-9	Bromacil	380	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	23184-66-9	Butachlor	570	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	786-19-6	Carbophenothion	96	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	380	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	9.4	ug/kg	NJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	380	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	56-72-4	Coumaphos	110	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	38	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	78-48-8	DEF	110	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2303-16-4	Diallate-II	670	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	333-41-5	Diazinon	76	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	120-36-5	Dichloroprop	110	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	62-73-7	Dichlorvos	76	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	60-57-1	Dieldrin	38	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	60-51-5	Dimethoate			R

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	957-51-7	Diphenamid	290	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	959-98-8	Endosulfan I	38	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	33213-65-9	Endosulfan II	38	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	38	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	72-20-8	Endrin	38	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	38	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	38	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2104-64-5	EPN	96	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	563-12-2	Ethion	67	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	13194-48-4	Ethoprop	76	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	22224-92-6	Fenamiphos	96	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	60168-88-9	Fenarimol	290	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	67	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	55-38-9	Fenthion	67	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	380	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	944-22-9	Fonophos	57	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	2.5	ug/kg	J
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	121-75-5	Malathion	76	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	150-50-5	Merphos	110	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	51218-45-2	Metholachlor	380	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	72-43-5	Methoxychlor	38	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	76	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	21087-64-9	Metribuzin	96	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	113-48-4	MGK-264	760	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	15299-99-7	Napropamide	290	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	380	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	56-38-2	Parathion	76	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	298-00-0	Parathion-methyl	76	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	21	ug/kg	J
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	298-02-2	Phorate	67	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1610-18-0	Prometon	96	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	7287-19-6	Prometryne	96	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	380	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	139-40-2	Propazine	96	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	299-84-3	Ronnel	67	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	122-34-9	Simazine	96	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	3689-24-5	Sulfotep	57	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	35400-43-2	Sulprofos	67	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	5902-51-2	Terbacil	290	ug/kg	UJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	96	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	22	ug/kg	J
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2303-17-5	Triallate	1.9	ug/kg	NJ
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1582-09-8	Trifluralin	140	ug/kg	U
98204150	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	570	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	15972-60-8	Alachlor	340	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	834-12-8	Ametryn	96	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1610-17-9	Atraton			R
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1912-24-9	Atrazine	96	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	314-40-9	Bromacil	380	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	23184-66-9	Butachlor	570	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	786-19-6	Carbophenothion	96	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	380	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	76	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	380	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	56-72-4	Coumaphos	110	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	38	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	78-48-8	DEF	110	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2303-16-4	Diallate-II	670	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	333-41-5	Diazinon	76	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	62-73-7	Dichlorvos	76	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	60-57-1	Dieldrin	11	ug/kg	
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	957-51-7	Diphenamid	290	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	959-98-8	Endosulfan I	4	ug/kg	J
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	33213-65-9	Endosulfan II	38	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	38	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	72-20-8	Endrin	38	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	38	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	38	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2104-64-5	EPN	96	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	563-12-2	Ethion	67	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	13194-48-4	Ethoprop	76	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	22224-92-6	Fenamiphos	96	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	60168-88-9	Fenarimol	290	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	67	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	55-38-9	Fenthion	67	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	380	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	944-22-9	Fonophos	57	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	7.2	ug/kg	J
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	121-75-5	Malathion	76	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	150-50-5	Merphos	110	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	51218-45-2	Metholachlor	380	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	72-43-5	Methoxychlor	38	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	76	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	21087-64-9	Metribuzin	96	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	113-48-4	MGK-264	760	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	15299-99-7	Napropamide	290	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	380	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	56-38-2	Parathion	76	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	298-00-0	Parathion-methyl	76	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	25	ug/kg	J
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	298-02-2	Phorate	67	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1610-18-0	Prometon	96	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	7287-19-6	Prometryne	96	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	380	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	139-40-2	Propazine	96	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	299-84-3	Ronnel	67	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	122-34-9	Simazine	96	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	3689-24-5	Sulfotep	57	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	35400-43-2	Sulprofos	67	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	5902-51-2	Terbacil	290	ug/kg	UJ
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	96	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	34	ug/kg	J
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2303-17-5	Triallate	290	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1582-09-8	Trifluralin	140	ug/kg	U
98204151	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	580	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	15972-60-8	Alachlor	350	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	834-12-8	Ametryn	97	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1610-17-9	Atraton			R
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1912-24-9	Atrazine	97	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	314-40-9	Bromacil	390	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	23184-66-9	Butachlor	580	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	786-19-6	Carbophenothion	97	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	390	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	7.3	ug/kg	NJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	390	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	39	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2303-16-4	Diallate-II	680	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	333-41-5	Diazinon	77	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	62-73-7	Dichlorvos	77	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	60-57-1	Dieldrin	15	ug/kg	
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	957-51-7	Diphenamid	290	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	959-98-8	Endosulfan I	39	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	33213-65-9	Endosulfan II	39	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	39	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	72-20-8	Endrin	39	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	39	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	39	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2104-64-5	EPN	97	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	563-12-2	Ethion	68	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	13194-48-4	Ethoprop	77	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	22224-92-6	Fenamiphos	97	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	60168-88-9	Fenarimol	290	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	68	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	55-38-9	Fenthion	68	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	390	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	944-22-9	Fonophos	58	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	7.9	ug/kg	J
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	121-75-5	Malathion	77	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	51218-45-2	Metholachlor	390	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	72-43-5	Methoxychlor	39	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	77	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	21087-64-9	Metribuzin	97	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	113-48-4	MGK-264	770	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	15299-99-7	Napropamide	290	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	390	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	56-38-2	Parathion	77	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	298-00-0	Parathion-methyl	77	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	30	ug/kg	J
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	298-02-2	Phorate	68	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1610-18-0	Prometon	97	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	7287-19-6	Prometryne	97	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	390	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	139-40-2	Propazine	97	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	299-84-3	Ronnel	68	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	122-34-9	Simazine	97	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	3689-24-5	Sulfotep	58	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	35400-43-2	Sulprofos	68	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	5902-51-2	Terbacil	290	ug/kg	UJ
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	97	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	34	ug/kg	J
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	2303-17-5	Triallate	290	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1582-09-8	Trifluralin	140	ug/kg	U
98204152	5/12/1998	Channel Catfish	WB	Yakima River	Columbia River	48	A	103	5		N		EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	570	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	15972-60-8	Alachlor	340	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	834-12-8	Ametryn	94	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1610-17-9	Atraton			R
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1912-24-9	Atrazine	94	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	150	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	150	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1861-40-1	Benefin	140	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	314-40-9	Bromacil	380	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	23184-66-9	Butachlor	570	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	133-06-2	Captan	130	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	786-19-6	Carbophenothion	94	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	380	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	4.2	ug/kg	J
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	380	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	56-72-4	Coumaphos	110	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	21725-46-2	Cyanazine	140	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	38	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	78-48-8	DEF	110	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2303-16-4	Diallate-II	660	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	333-41-5	Diazinon	76	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	120-36-5	Dichlorprop	100	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	62-73-7	Dichlorvos	76	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	60-57-1	Dieldrin	16	ug/kg	
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	78-34-2	Dioxathion	160	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	957-51-7	Diphenamid	280	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	959-98-8	Endosulfan I	2.1	ug/kg	J
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	33213-65-9	Endosulfan II	1.1	ug/kg	NJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	38	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	72-20-8	Endrin	38	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	38	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	38	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2104-64-5	EPN	94	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	140	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	563-12-2	Ethion	66	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	13194-48-4	Ethoprop	76	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	22224-92-6	Fenamiphos	94	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	60168-88-9	Fenarimol	280	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	66	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	55-38-9	Fenthion	66	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	380	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	944-22-9	Fonophos	57	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	6.8	ug/kg	J
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	732-11-6	Imidan	100	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	121-75-5	Malathion	76	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	150-50-5	Merphos	110	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	51218-45-2	Metholachlor	380	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	72-43-5	Methoxychlor	38	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	76	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	*311455	Methyl Paraoxon	170	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	21087-64-9	Metribuzin	94	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	113-48-4	MGK-264	760	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	15299-99-7	Napropamide	280	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	380	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	56-38-2	Parathion	76	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	298-00-0	Parathion-methyl	76	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	40487-42-1	Pendimethalin	140	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	20	ug/kg	J
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	298-02-2	Phorate	66	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1610-18-0	Prometon	94	ug/kg	U

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	7287-19-6	Prometryne	94	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	380	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	139-40-2	Propazine	94	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	299-84-3	Ronnel	66	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	122-34-9	Simazine	94	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	3689-24-5	Sulfotep	57	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	35400-43-2	Sulprofos	66	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	5902-51-2	Terbacil	280	ug/kg	UJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	94	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	39	ug/kg	J
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2303-17-5	Triallate	280	ug/kg	U
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1582-09-8	Trifluralin	5.3	ug/kg	NJ
98204153	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	590	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	15972-60-8	Alachlor	350	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	834-12-8	Ametryn	99	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1610-17-9	Atraton			R
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1912-24-9	Atrazine	99	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	200	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	314-40-9	Bromacil	390	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	23184-66-9	Butachlor	590	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2008-41-5	Butylate	200	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2425-06-1	Captafol	260	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	786-19-6	Carbophenothion	99	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	390	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	6.1	ug/kg	J
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	390	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1134-23-2	Cycloate	200	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1897-45-6	Daconil	240	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	3.9	ug/kg	NJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2303-16-4	Diallate-II	690	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	333-41-5	Diazinon	79	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	200	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	120-36-5	Dichloroprop	110	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	62-73-7	Dichlorvos	79	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	60-57-1	Dieldrin	9.2	ug/kg	
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	957-51-7	Diphenamid	300	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	330-54-1	Diuron	200	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	959-98-8	Endosulfan I	2	ug/kg	J
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	33213-65-9	Endosulfan II	1.8	ug/kg	NJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	1.8	ug/kg	NJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	72-20-8	Endrin	39	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	39	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	39	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2104-64-5	EPN	99	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	759-94-4	Eptam	200	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	55283-68-6	Ethalfuralin (Sonalan)	150	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	563-12-2	Ethion	69	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	13194-48-4	Ethoprop	79	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	22224-92-6	Fenamiphos	99	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	60168-88-9	Fenarimol	300	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	69	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	55-38-9	Fenthion	69	ug/kg	UJ

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	390	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	944-22-9	Fonophos	59	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	961-11-5	Gardona	200	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	7.4	ug/kg	J
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	115-32-2	Kelthane	200	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	121-75-5	Malathion	79	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	51218-45-2	Metholachlor	390	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	72-43-5	Methoxychlor	39	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	79	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	21087-64-9	Metribuzin	99	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	7786-34-7	Mevinphos	200	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	113-48-4	MGK-264	790	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2212-67-1	Molinate	200	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	15299-99-7	Napropamide	300	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	27314-13-2	Norflurazon	200	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	390	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	56-38-2	Parathion	79	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	298-00-0	Parathion-methyl	79	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1114-71-2	Pebulate	200	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	26	ug/kg	J
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	298-02-2	Phorate	69	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	26399-36-0	Profluralin	240	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1610-18-0	Prometon	99	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	7287-19-6	Prometryne	99	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	390	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	240	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2312-35-8	Propargite	200	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	139-40-2	Propazine	99	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	31218-83-4	Propetamphos	200	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	299-84-3	Ronnel	69	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	122-34-9	Simazine	99	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	3689-24-5	Sulfotep	59	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	35400-43-2	Sulprofos	69	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	5902-51-2	Terbacil	300	ug/kg	UJ
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	99	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	45	ug/kg	J
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	43121-43-3	Triademefon	260	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2303-17-5	Triallate	300	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
98204154	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1929-77-7	Vernolate	200	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	3383-96-8	Abate (Temephos)	580	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	15972-60-8	Alachlor	350	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	834-12-8	Ametryn	97	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1610-17-9	Atraton			R
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1912-24-9	Atrazine	97	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	642-71-9	Azinphos Ethyl (Ethyl guhion)	160	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	86-50-0	Azinphos-methyl	160	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1861-40-1	Benefin	150	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1194-65-6	Benzonitrile, 2,6-dichloro-	190	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	314-40-9	Bromacil	390	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	23184-66-9	Butachlor	580	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2008-41-5	Butylate	190	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2425-06-1	Captafol	250	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	133-06-2	Captan	140	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	786-19-6	Carbophenothion	97	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	5234-68-5	Carboxin			R
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	101-21-3	Chlorpropham (CIPC)	390	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	5598-13-0	Chlorpyrifos-methyl	3.9	ug/kg	J
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	52645-53-1	cis-Permethrin	390	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	56-72-4	Coumaphos	120	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	21725-46-2	Cyanazine	150	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1134-23-2	Cycloate	190	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1897-45-6	Daconil	230	ug/kg	U

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SAMPLE NUMBER	SAMPL-ING DATE	COMMONNAME	TIS-SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA-TION ID	SUB SITE ID	COMPO SITE GROUP	NUM-BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2136-79-0	DACTHAL-DCPA	39	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	78-48-8	DEF	120	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	298-03-3	Demeton-0			R
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	126-75-0	Demeton-s			R
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2303-16-4	Diallate-II	680	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	333-41-5	Diazinon	78	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	90-98-2	Dichlorobenzophenone	190	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	120-36-5	Dichlorprop	110	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	62-73-7	Dichlorvos	78	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	60-57-1	Dieldrin	16	ug/kg	
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	60-51-5	Dimethoate			R
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	78-34-2	Dioxathion	170	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	957-51-7	Diphenamid	290	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	298-04-4	Disulfoton			R
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	330-54-1	Diuron	190	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	959-98-8	Endosulfan I	2.4	ug/kg	J
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	33213-65-9	Endosulfan II	1.3	ug/kg	J
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1031-07-8	Endosulfan Sulfate	2.1	ug/kg	NJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	72-20-8	Endrin	39	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	7421-93-4	Endrin Aldehyde	39	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	53494-70-5	Endrin Ketone	39	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2104-64-5	EPN	97	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	759-94-4	Eptam	190	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	55283-68-6	Ethalffluralin (Sonalan)	150	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	563-12-2	Ethion	68	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	13194-48-4	Ethoprop	78	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	22224-92-6	Fenamiphos	97	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	60168-88-9	Fenarimol	290	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	122-14-5	Fenitrothion (SP)	68	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	115-90-2	Fensulfothion			R
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	55-38-9	Fenthion	68	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	51630-58-1	Fenvalerate (total)	390	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	59756-60-4	Fluridone			R
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	944-22-9	Fonophos	58	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	961-11-5	Gardona	190	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	unknown	Hexabromodiphenyl ether	10	ug/kg	J
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	51235-04-2	Hexazinone			R
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	732-11-6	Imidan	110	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	115-32-2	Kelthane	190	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	121-75-5	Malathion	78	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	150-50-5	Merphos	120	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	57837-19-1	Metalaxyl			R
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	51218-45-2	Metholachlor	390	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	72-43-5	Methoxychlor	39	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	*5598130	Methyl Chlorpyrifos	78	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	*311455	Methyl Paraoxon	180	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	21087-64-9	Metribuzin	97	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	7786-34-7	Mevinphos	190	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	113-48-4	MGK-264	780	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2212-67-1	Molinate	190	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	15299-99-7	Napropamide	290	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	27314-13-2	Norflurazon	190	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	42874-03-3	Oxyfluorfen	390	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	56-38-2	Parathion	78	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	298-00-0	Parathion-methyl	78	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1114-71-2	Pebulate	190	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	40487-42-1	Pendimethalin	150	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	unknown	Pentabromodiphenyl ether	18	ug/kg	J
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	298-02-2	Phorate	68	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	297-99-4	Phosphamidan			R
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	26399-36-0	Profluralin	230	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1610-18-0	Prometon	97	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	7287-19-6	Prometryne	97	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	23950-58-5	Pronamide (kerb)	390	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1918-16-7	Propachlor (Ramrod)	230	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2312-35-8	Propargite	190	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	139-40-2	Propazine	97	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	31218-83-4	Propetamphos	190	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	299-84-3	Ronnel	68	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	122-34-9	Simazine	97	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	3689-24-5	Sulfotep	58	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	35400-43-2	Sulprofos	68	ug/kg	UJ

Volume 1, Appendix L. AED Pesticide Measurement Results.

SAMPLE NUMBER	SAMPL- ING DATE	COMMONNAME	TIS- SUE TYPE	WATERBODY LOCATION	TRIBUTARY OF	STA- TION ID	SUB SITE ID	COMPO SITE GROUP	NUM- BER IN COMP	DUP #	DUP or NORMAL SAMPLE	LIPIDS* %	ANAL METHOD	CHEMICAL GROUP	CAS NUMBER	CHEMICAL	CONC.	UNITS (Wet)	QUALI FIER
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	34014-18-1	Tebuthiuron			R
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	5902-51-2	Terbacil	290	ug/kg	UJ
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	886-50-0	Terbutryn (Igran)	97	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	unknown	Tetrabromodiphenyl ether	53	ug/kg	J
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	43121-43-3	Triademefon	250	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	2303-17-5	Triallate	290	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1582-09-8	Trifluralin	150	ug/kg	U
98204155	5/12/1998	Channel Catfish	FS	Yakima River	Columbia River	48	A	104	2		N		EPA 8085	AED-Pest	1929-77-7	Vernolate	190	ug/kg	U
	* = Percent lipids is determined according to Method 1613B. Tissue sample is extracted for 18-24 hours using methylene chloride:hexane (1:1) in a Soxhlet extractor.																		
	R. = The sample was submitted to a Rad. Lab for radionuclide measurements.																		
	R.O. = The sample was submitted to a Rad. Lab for only radionuclide measurements.																		
	No other chemical measurements were made on this sample.																		
	M.O. = The sample was only analyzed by EPA Manchester Lab for QAPP target compounds.																		
	AL = Rad. measurements were made at the EPA Montgomery Lab in Alabama.																		
	NA = Does Not Apply																		



Region 10, 1200 Sixth Avenue, Seattle WA 98101

**COLUMBIA RIVER BASIN FISH
CONTAMINANT SURVEY**

**VOLUME I
Appendix M**

Hazard Indices Across Study Sites

July 2002

**Prepared by
U.S. Environmental Protection Agency
Region 10
Seattle, Washington**

M.1 Comparison of Hazard Indices Across Sites and Among Species

Non-cancer hazards were estimated for fish collected in the Columbia River Basin as described in Section 6. Graphical representations of the data are presented in this section to show hazard indices for multiple species, sample types, and sites.

To show the greatest number of hazard indices, the scenario that generates the highest risk estimates - a CRITFC's member tribal child with a high fish consumption rate (162 g/day) - was chosen to compare estimates among species and sampled sites. Total hazard indices are shown for all fish species. In addition to total hazard indices, endpoint specific hazard indices which exceeded 1.0, are shown for the liver health endpoint, the central nervous system health endpoint, the immune system health endpoint, and the reproduction/development health endpoint. These four health endpoints are presented because they tended to have the highest hazard index values and exceeded 1.0 in the most fish species for a CRITFC's member tribal child with a high fish consumption rate.

M.1.1 Resident Fish Species

Samples of six resident fish species—bridgelip sucker, largescale sucker, mountain whitefish, white sturgeon, walleye, and rainbow trout—were collected from the following sites in the Columbia River Basin:

- Site 6 - located in the Columbia River between the Bonneville Dam and the Dalles Dam
- Site 7 - located in the Columbia River between the Dalles Dam and the John Day Dam
- Site 8 - located in the Columbia River between the John Day Dam and the McNary Dam
- Site 9L - located in the upper Columbia River below the Snake River
- Site 9U - located in the upper Columbia River above the Snake River
- Site 56 - located in the Klickitat River
- Site 98 - located in the Deschutes River
- Site 30 and 101 - located in the Umatilla River
- Site 48 and 49 - located in the Yakima River

Total hazard indices and hazard indices for four health endpoints for the six resident fish species are presented in Figures 6-1 through 6-10. Note that the hazard index scales on the Y axes differ, ranging from 0.1 to 100 for the endpoints for central nervous system, reproduction/developmental, and liver, and from 0.1 to 1000 for the endpoint of immunotoxicity and for total hazard index.

It is difficult to draw conclusions from these figures because different species were sampled at different locations. However, it appears that for the endpoint specific hazard indices for liver and the immune system and for total hazard indices for a given species, some sites (e.g., 56, 98, 30 and 101) tend to have lower values than the other sampled sites. The central nervous system and reproduction/development health endpoints did not show as much of a trend. This may be because these health endpoints are driven by concentrations of mercury, which appear to be more evenly distributed among the fish tissues collected within the Columbia River.

Total Hazard Indices

Total hazard indices for the CRITFC's member tribal child with a high fish consumption rate (162 g/day) ranged in value from 15 for whole body rainbow trout at site 101 to a high of 290 for fillet without skin samples of white sturgeon at site 9U. White sturgeon at Sites 9L and 9U and mountain whitefish at Site 48 had the highest total hazard indices in fillet samples (Figure 6-1). The highest total hazard indices in whole-body samples occurred for walleye at Site 7; white sturgeon at Site 8, 9L, and 9U; mountain whitefish at Site 9U and Site 48; and largescale sucker at Site 9U and Site 48 (Figure 6-2).

Liver Health Endpoint

Hazard indices for the liver health endpoint ranged from a low of 1 for rainbow trout at site 101, whole body samples, to a high of 41 for white sturgeon, fillet without skin samples, at site 9U. The highest hazard indices for the liver health endpoint in fillet samples occurred for white sturgeon at all Columbia River sites and Site 13, mountain whitefish at Site 9U and Site 48, and largescale sucker at Site 48 (Figure 6-3). The highest hazard indices for the liver health endpoint in whole-body samples occurred for largescale sucker at Site 9U and Site 48; white sturgeon at Sites 8, 9L, and 9U; mountain whitefish at Site 48, and walleye at Site 7 (Figure 6-4).

Central Nervous System Health Endpoint

Hazard indices for the central nervous system health endpoint ranged from a low of 4.3 for mountain whitefish fillets at site 8 to a high of 39 for largescale sucker fillets at site 13. The highest hazard indices for the central nervous system health endpoint in fillet samples occurred for largescale sucker at Sites 9U, 30, 13, 48, 49; white sturgeon at all Columbia River sites and Site 13; walleye at Site 30; and mountain whitefish at Site 48 (Figure 6-5). The highest hazard indices for the central nervous system health endpoint in whole-body samples, occurred for largescale sucker at Sites 8, 9U, 98, 13, 48, 49; walleye at Site 7 and Site 30; white sturgeon at Site 8 and Site 9L; and rainbow trout at Site 98 (Figure 6-6).

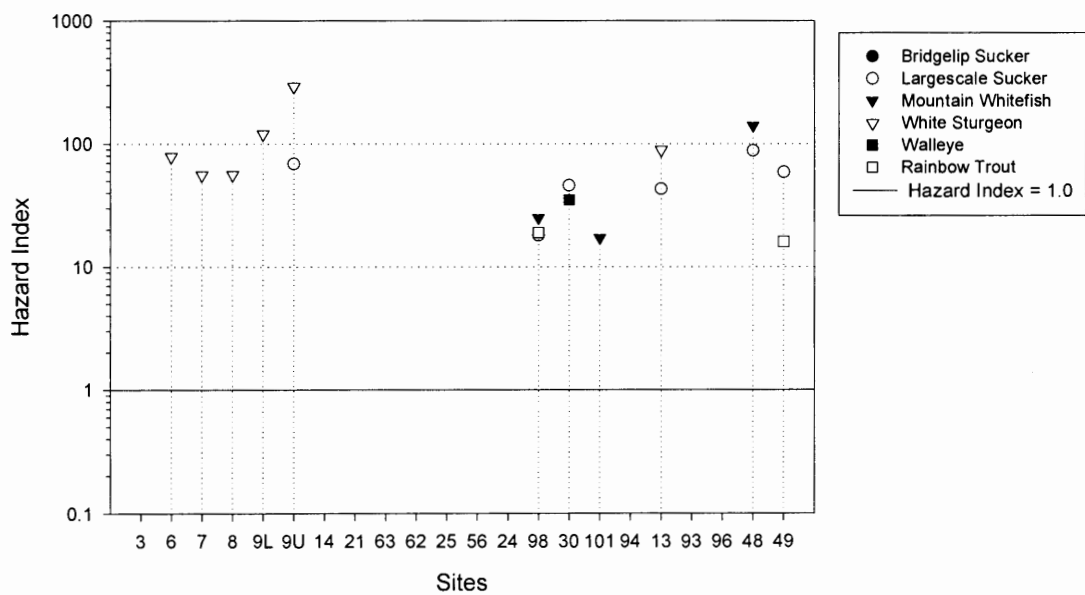


Figure 6-1. Total hazard indices in fillet samples of resident fish species by site

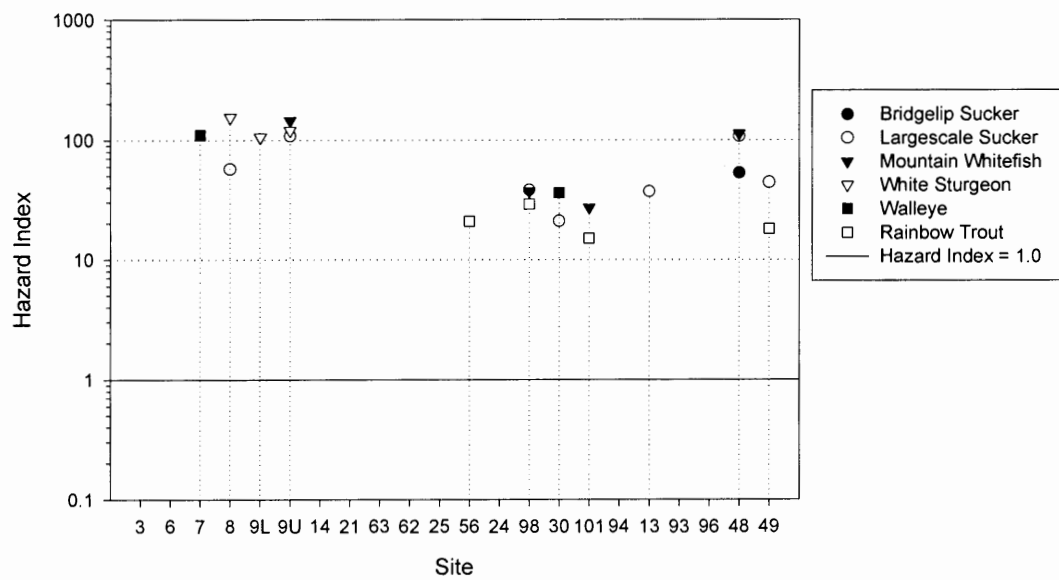


Figure 6-2. Total hazard index in whole body samples of resident fish species by site

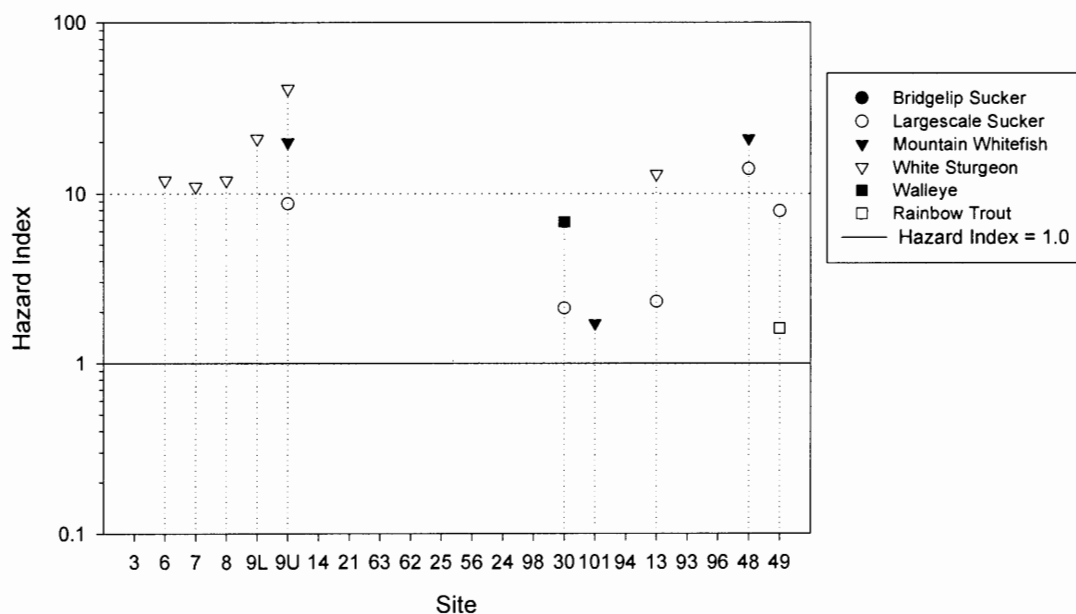


Figure 6-3. Hazard indices for the liver health endpoint in fillet samples of resident fish species by site

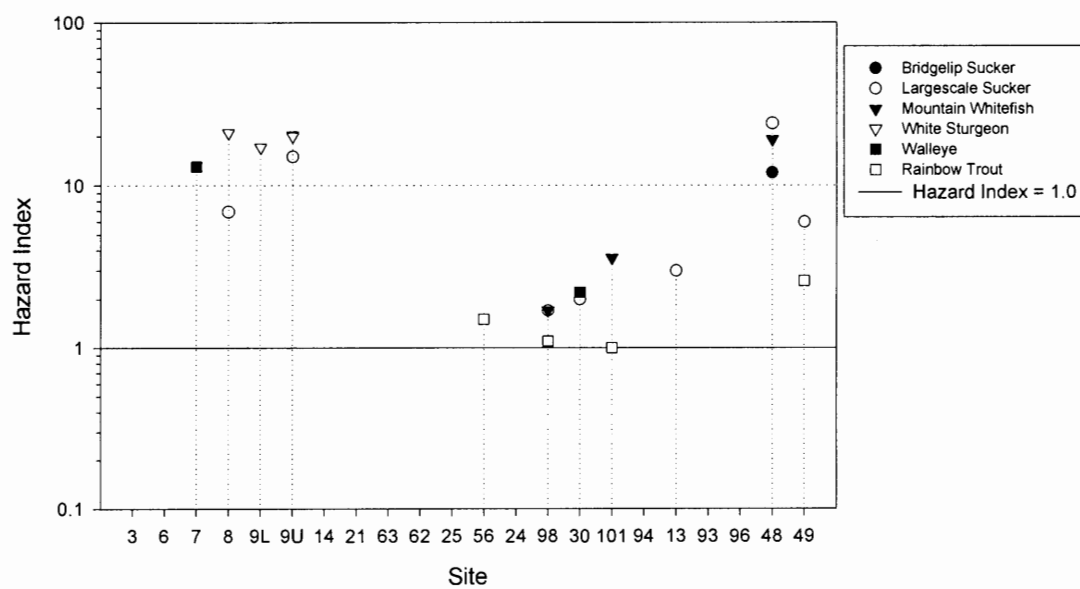


Figure 6-4. Hazard indices for the liver health endpoint in wholebody samples of resident fish species by site

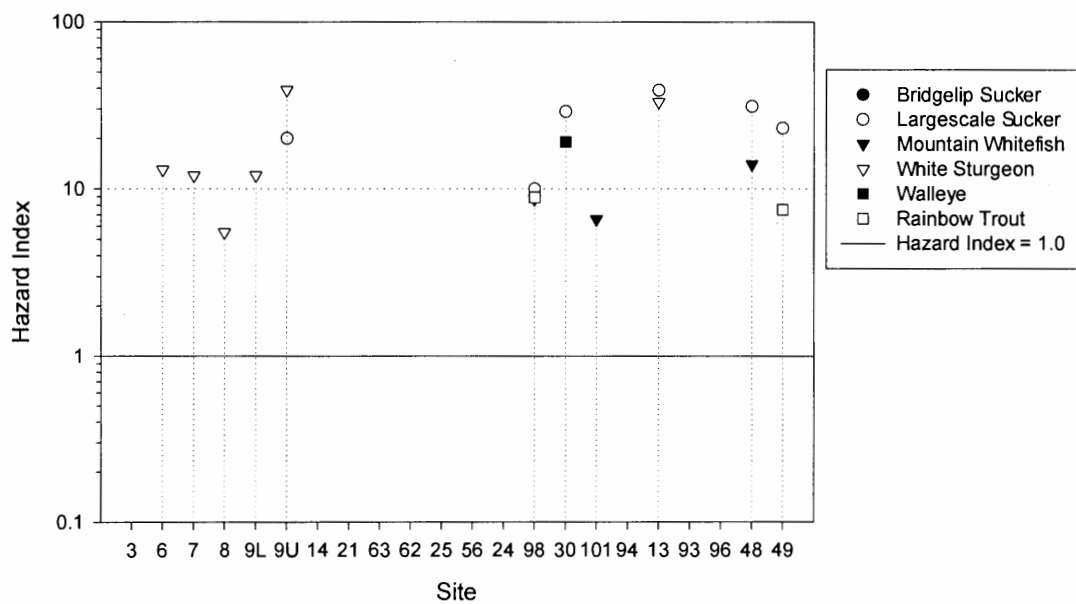


Figure 6-5. Hazard indices for the central nervous system health endpoint in fillet samples of resident fish species by site

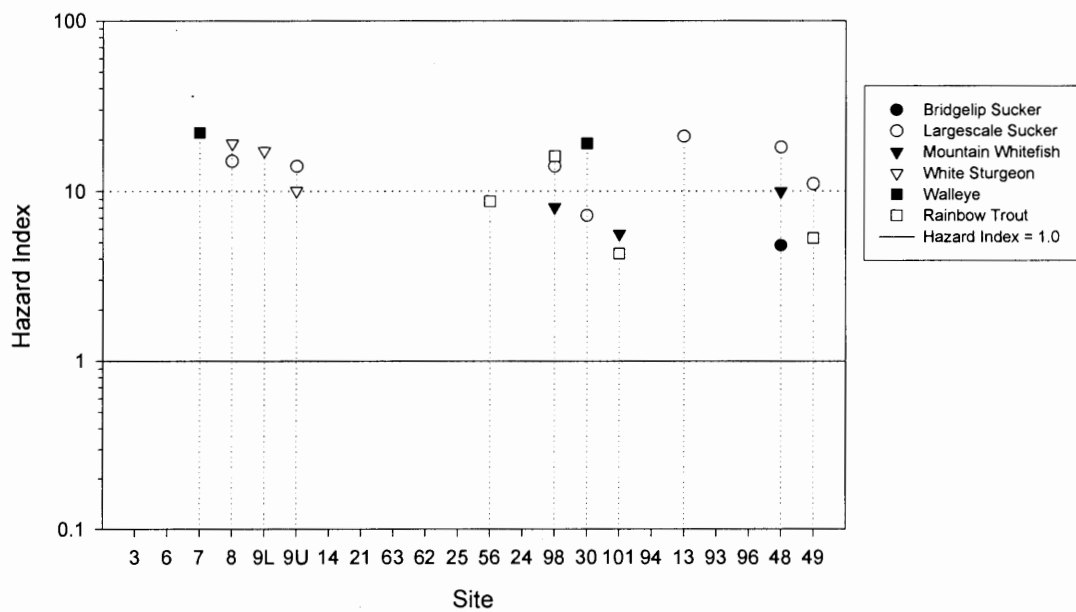


Figure 6-6. Hazard indices for the central nervous system health endpoint in whole body samples of resident fish species by site

Immune System Health Endpoint

Hazard indices for the immune system health endpoint ranged from 4.8 for whole body rainbow trout samples at site 101 to a high of 270 for mountain whitefish at site 9U. The highest hazard indices for the immune system health endpoint in fillet samples for mountain whitefish were at Site 9U and 48 and for white sturgeon at Site 9U (Figure 6-7). The highest hazard indices for the immune system health endpoint in whole-body samples occurred for mountain whitefish at Site 9U and white sturgeon at Site 8 (Figure 6-8).

Reproduction/Development Health Endpoint

Hazard indices for the reproduction/development health endpoint are similar to those for the central nervous system. The highest hazard indices for the reproduction/development health endpoint in fillet samples occurred for largescale sucker at Sites 9U, 30, 13, 48, 49, and 98; white sturgeon at Sites 6, 7, 9L, 9U, and 13; walleye at Site 30, and mountain whitefish at Site 48 (Figure 6-9). The highest hazard indices for the reproduction/development health endpoint in whole-body samples occurred for walleye at Site 7 and Site 30; white sturgeon at Site 8 and Site 9L, largescale sucker at Sites 8, 9U, 98, 48, and 49; and rainbow trout at Site 98 (Figure 6-10).

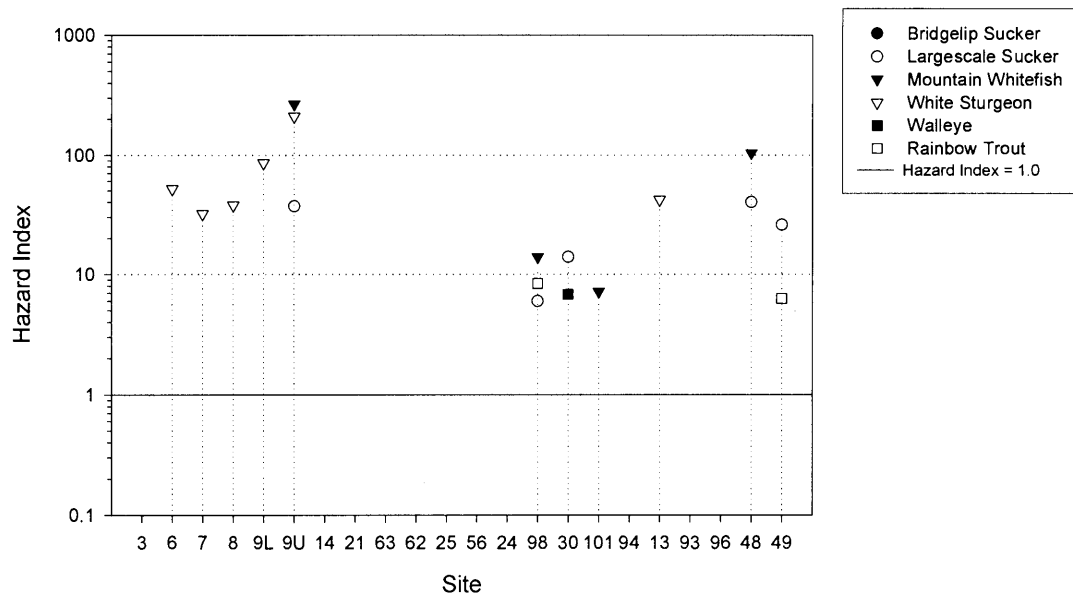


Figure 6-7. Hazard indices for the immune system health endpoint in fillet samples of resident fish species by site

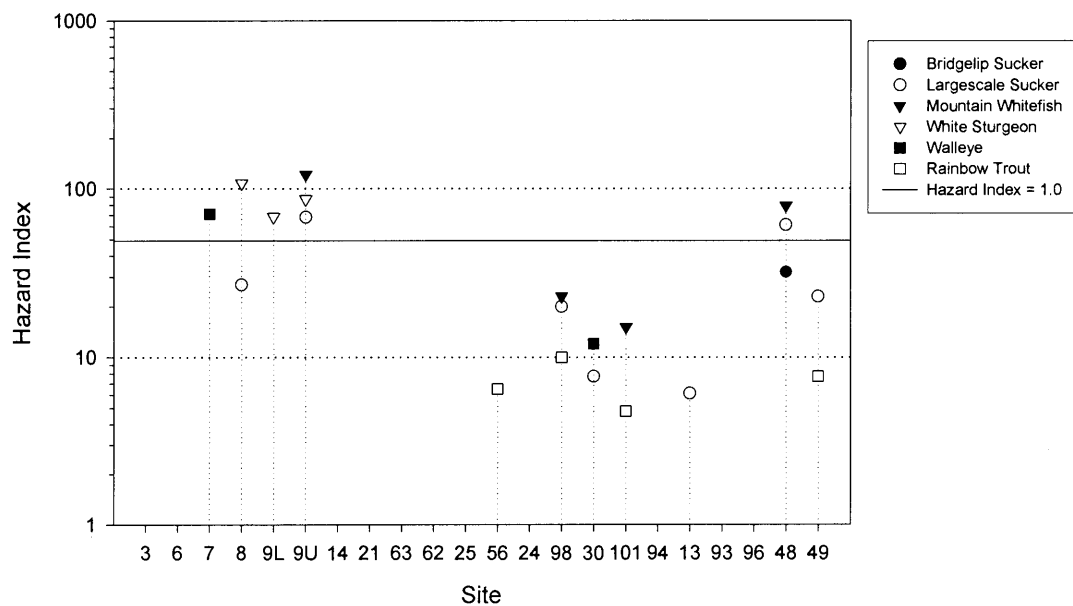


Figure 6-8. Hazard indices for the immune system health endpoint in whole body samples of resident fish species by site

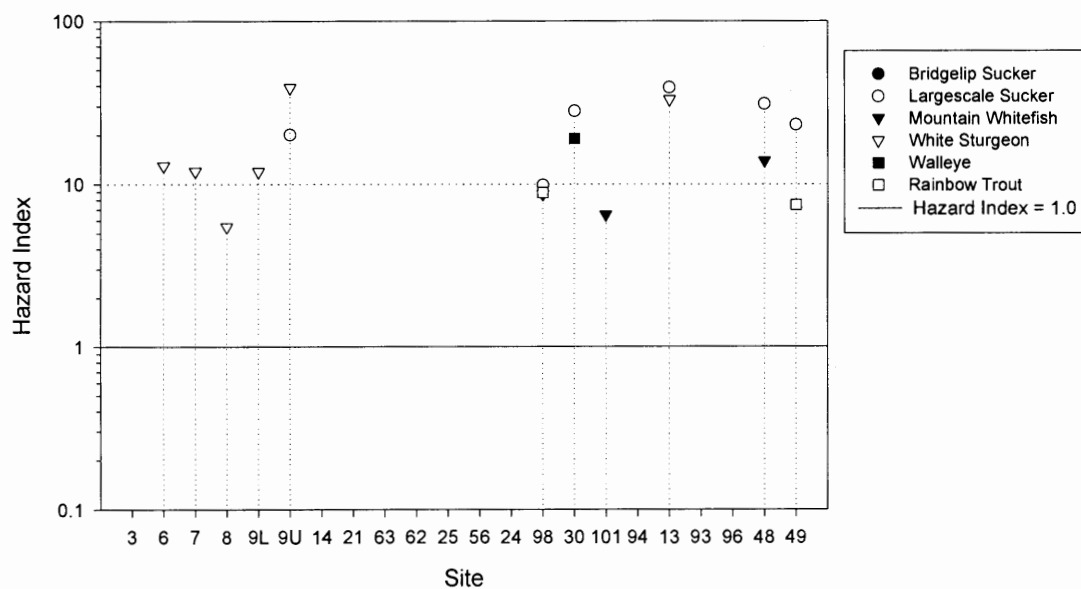


Figure 6-9. Hazard indices for the reproduction/development health endpoint in fillet samples of resident fish species by site

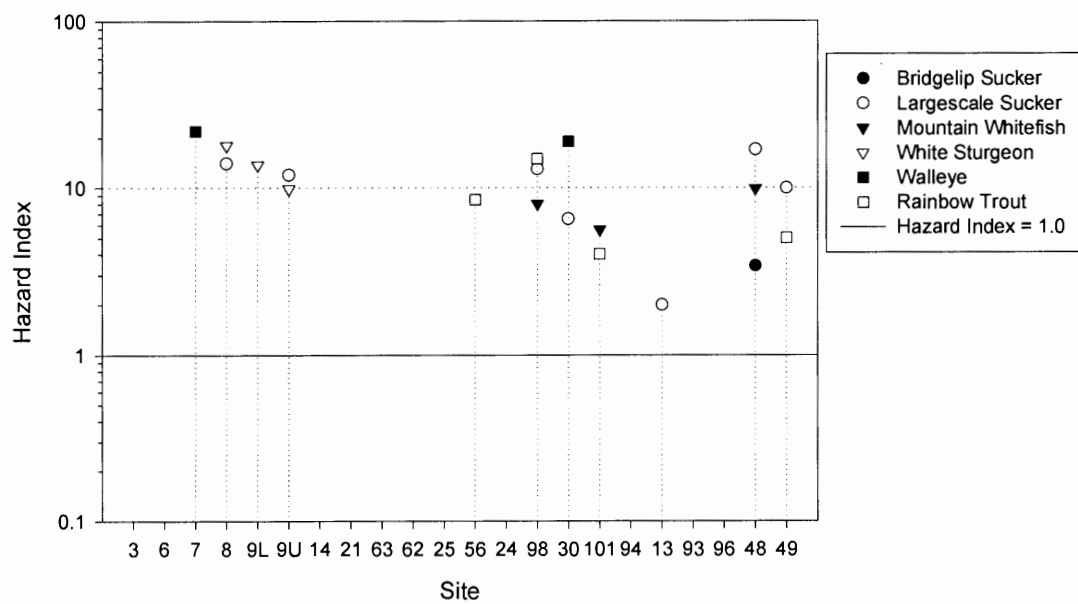


Figure 6-10. Hazard Indices for the reproduction/developmental health endpoint in whole body samples of resident fish species by site

M.1.2 Anadromous Fish Species

Samples of anadromous fish, coho salmon, fall chinook salmon, spring chinook salmon, steelhead, eulachon, and Pacific lamprey, were collected from the following sites in the Columbia River Basin:

- Site 8 - located in the Columbia River between the John Day Dam and the McNary Dam
- Site 14 - located in the upper Columbia River above the Snake River
- Site 21 - located in the Willamette River
- Site 63 - located in the Wind River
- Site 62 - located in the Little White Salmon River
- Site 25 - located in the Hood River
- Site 56 - located in the Klickitat River
- Site 24 - located in Fifteen Mile Creek
- Site 98 - located in the Deschutes River
- Site 30 - located in the Umatilla River
- Site 93 - located in the Snake River
- Site 96 - located in the Clearwater River
- Site 48 - located in the Yakima River
- Site 51 - located in the Wenatchee River

Total hazard indices and hazard indices for four health endpoints for the anadromous fish species are presented in Figures 6-11 through 6-20. In general, total hazard indices, liver health endpoint hazard indices, and immune system health endpoint hazard indices were much lower in most anadromous fish species compared to most of the resident fish species. Hazard indices for the central nervous system and reproduction/development health endpoints were similar in magnitude between anadromous and resident fish species.

Total Hazard Indices

Total hazard indices ranged from a low of 8.6 in whole body eulachon to a high of 99 in whole body Pacific lamprey at site 24. The highest total hazard indices in fillet samples occurred for Pacific lamprey at Site 21 (Figure 6-11). The highest total hazard indices in whole-body samples, occurred for Pacific lamprey at Site 24 (Figure 6-12).

Liver Health Endpoint

Hazard indices for the liver health endpoint in anadromous fish species were all less than 10. The highest hazard index for the liver health endpoint occurred for Pacific lamprey at Site 21 (Figure 6-13). The highest hazard indices for the liver health endpoint in whole-body samples occurred for Pacific lamprey at Sites 21 and 24 (Figure 6-14).

Central Nervous System Health Endpoint

Hazard indices for the central nervous system health endpoint in anadromous fish ranged from a

low of 4.2 for whole body fall chinook at site 56 to a high of 33 for spring chinook fillet at site 56. The highest hazard indices in fillet samples occurred for spring chinook salmon at Sites 56 and 51 and fall chinook salmon at Site 14 (Figure 6-15). The highest hazard indices in whole-body samples occurred for steelhead at Site 93 and Site 96, Pacific lamprey at Site 24, coho salmon at Site 30, and spring chinook salmon at Site 56 (Figure 6-16).

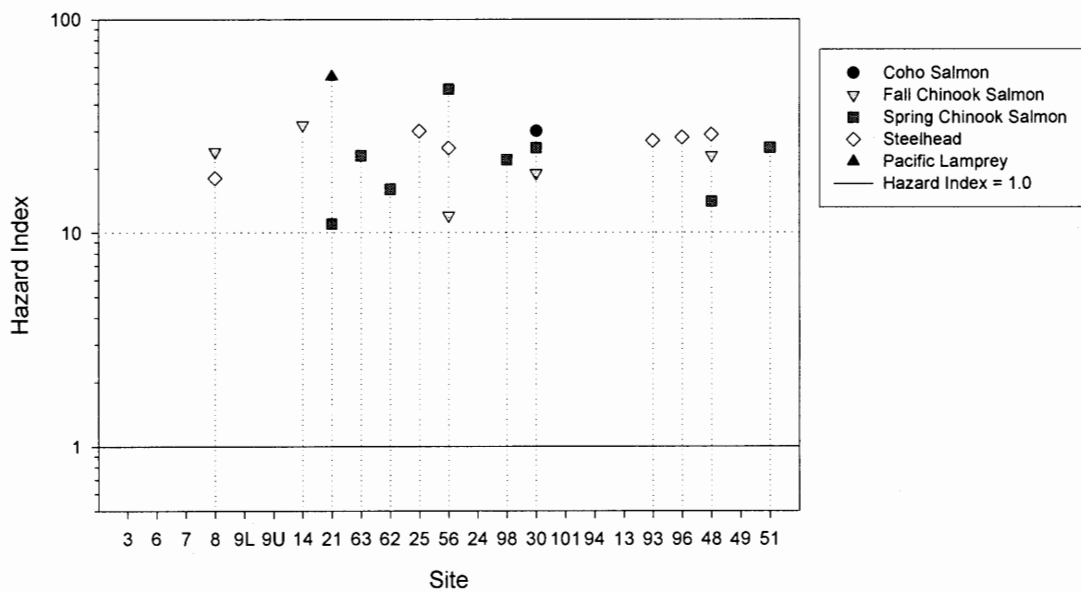


Figure 6-11. Total hazard index in fillet samples of anadromous fish species by site

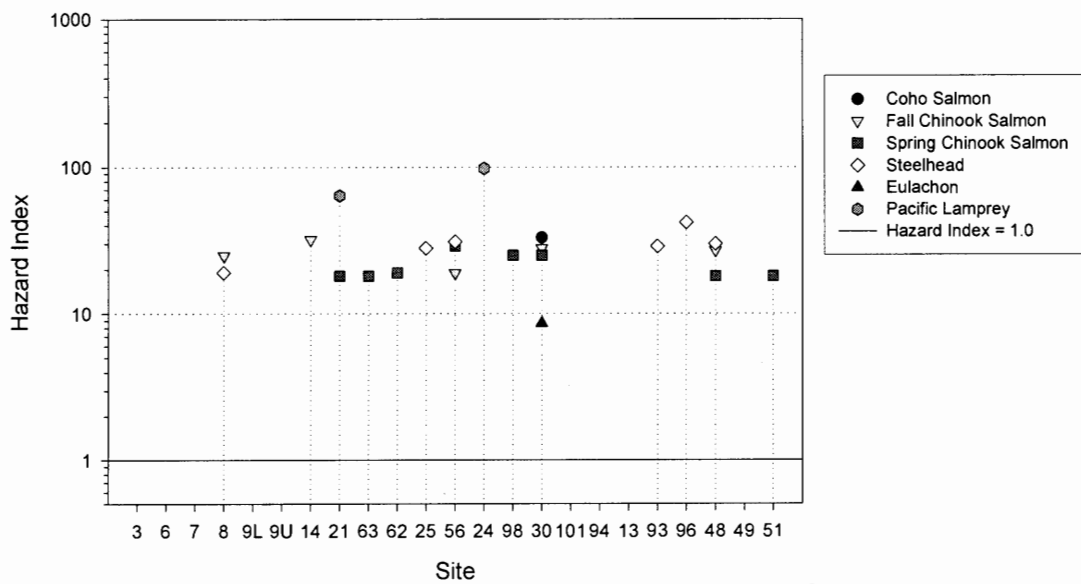


Figure 6-12. Total hazard index in whole body samples of anadromous fish species by site

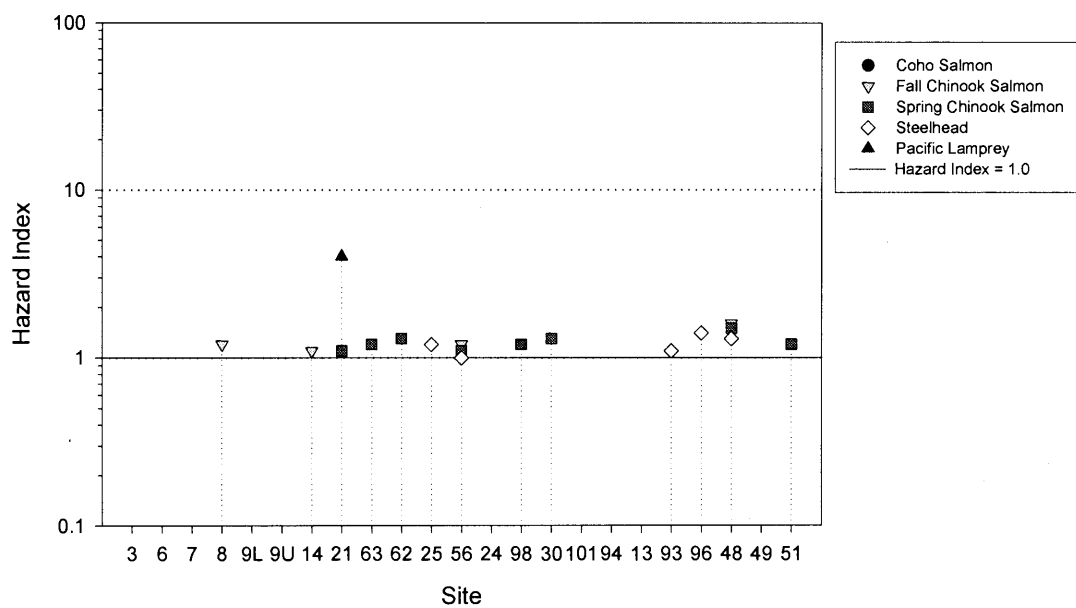


Figure 6-13. Hazard indices for the liver health endpoint in fillet samples of anadromous fish species by site

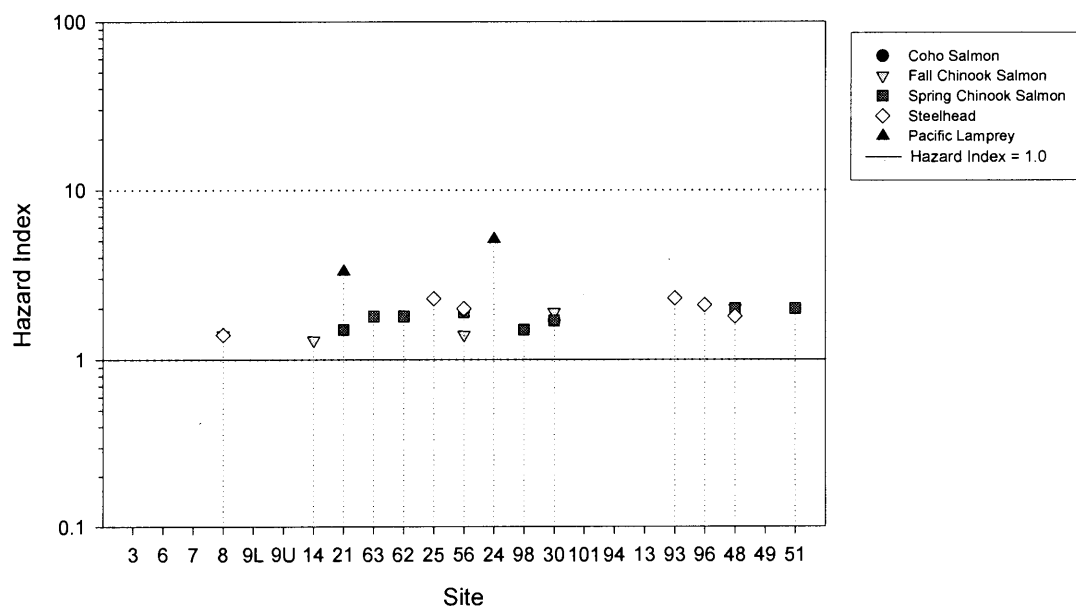


Figure 6-14. Hazard indices for the liver health endpoint in whole body samples of anadromous fish species by site

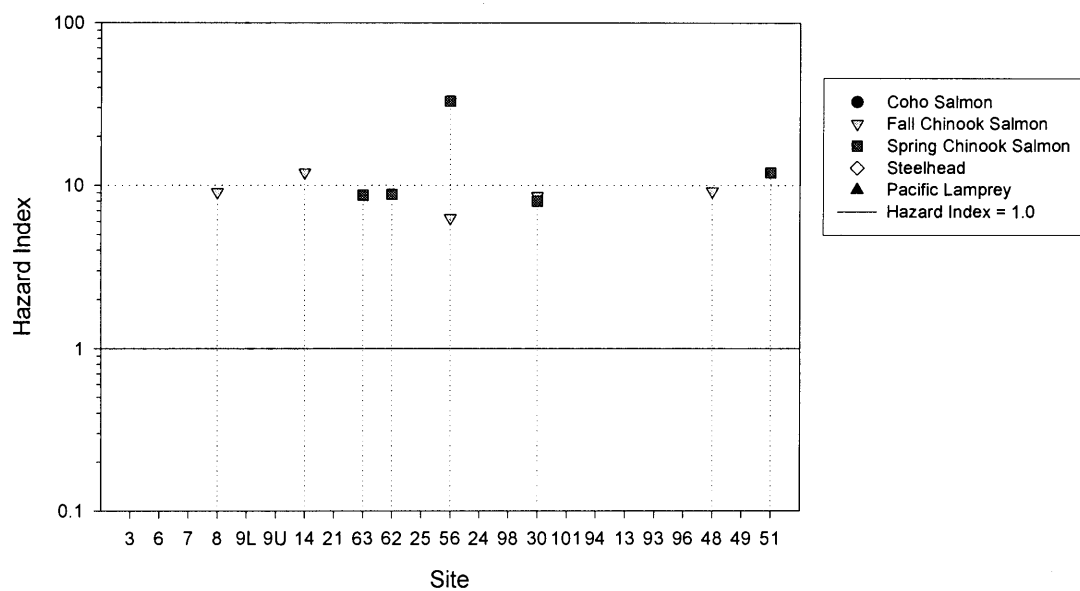


Figure 6-15. Hazard indices for the central nervous system health endpoint in fillet samples of anadromous species by site

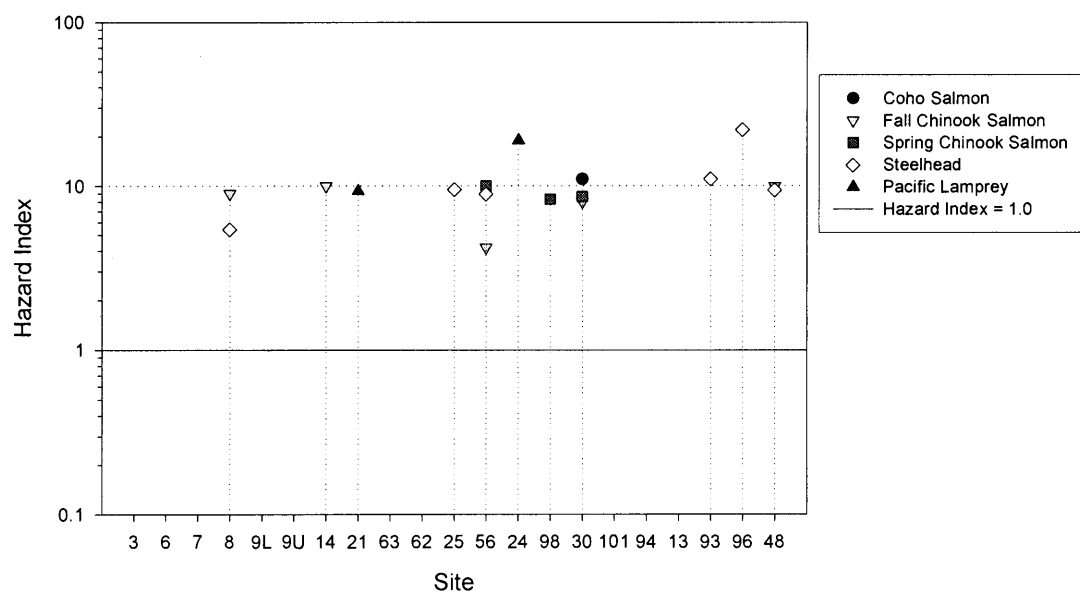


Figure 6-16. Hazard indices for the central nervous system health endpoint in whole body samples of anadromous fish species by site

Immune System Health Endpoint

The lowest hazard index for the immune system was 1.2 for spring chinook fillets at site 56 and the high was 70 for whole body Pacific lamprey at site. The highest hazard indices in fillet samples occurred for Pacific lamprey at Site 21, fall chinook salmon at Site 14, coho salmon at Site 30, and steelhead at Sites 96 and 48 (Figure 6-17). The highest hazard indices for whole-body samples occurred for Pacific lamprey at Site 21 and Site 24; coho salmon at Site 30; fall chinook salmon at Site 14 and Site 30, and steelhead at Sites 93, 96, and 48 (Figure 6-18).

Reproduction/Development Health Endpoint

The hazard indices for the reproduction/development health endpoint in anadromous fish species were similar to those for the central nervous system. The highest hazard indices in fillet samples occurred for spring chinook salmon at Site 56; steelhead at Sites 25, 56, 93, 96, and 48; fall chinook salmon at Site 14, and coho salmon at Site 30 (Figure 6-19). The highest hazard indices in whole-body samples occurred for steelhead at Site 93 and Site 96, Pacific lamprey at Site 24, coho salmon at Site 30, spring chinook salmon at Site 56, and fall chinook salmon at Site 14 and Site 48 (Figure 6-20).

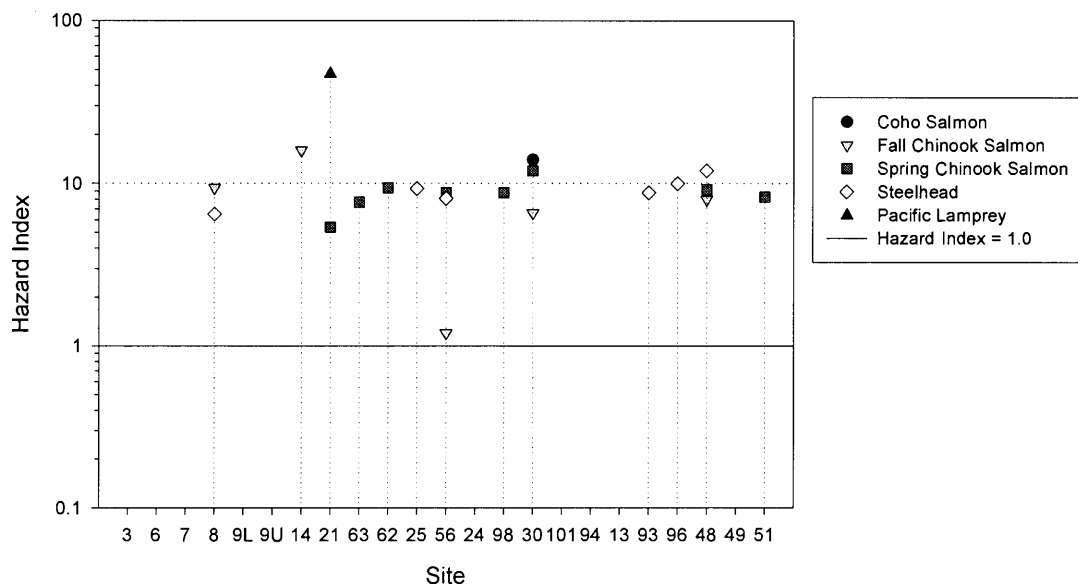


Figure 6-17. Hazard indices for the immune system health endpoint in fillet samples of anadromous fish species by site

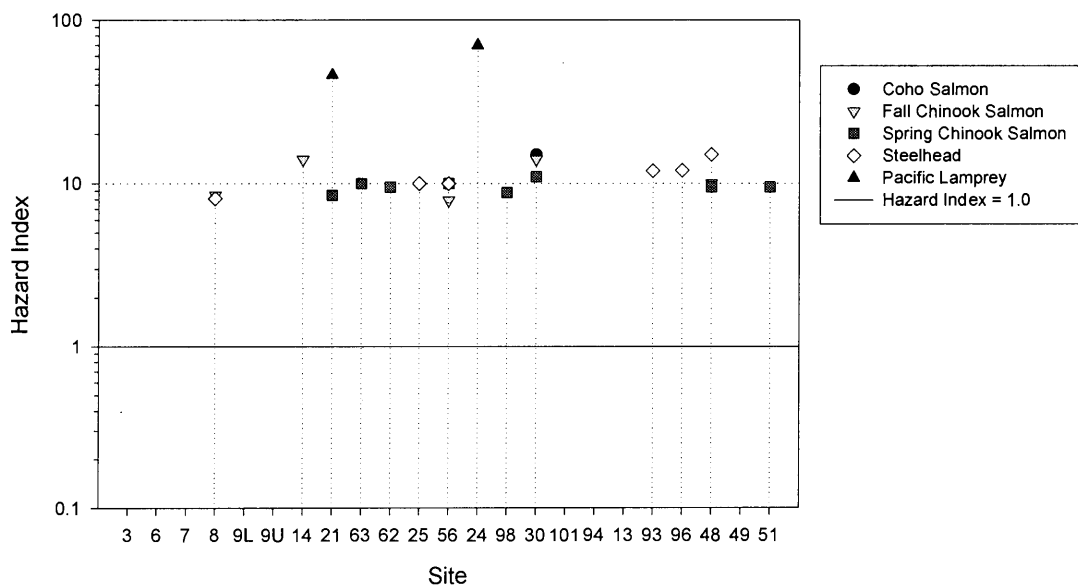


Figure 6-18. Hazard indices for the immune system health endpoint in whole body samples of anadromous fish species by site

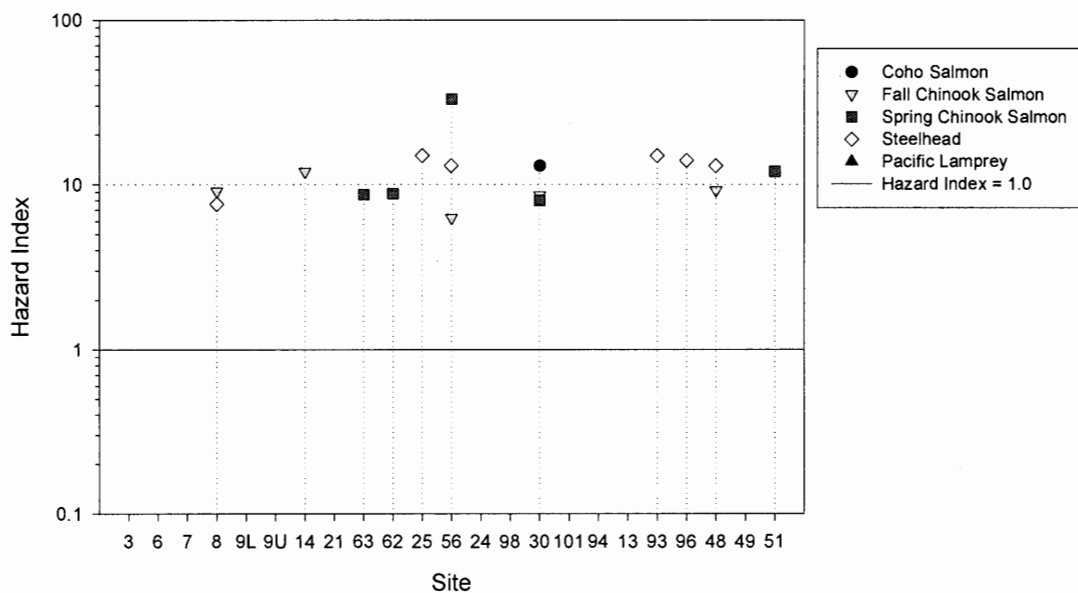


Figure 6-19. Hazard indices for the reproduction/developmental health endpoint in fillet samples of anadromous fish species by site

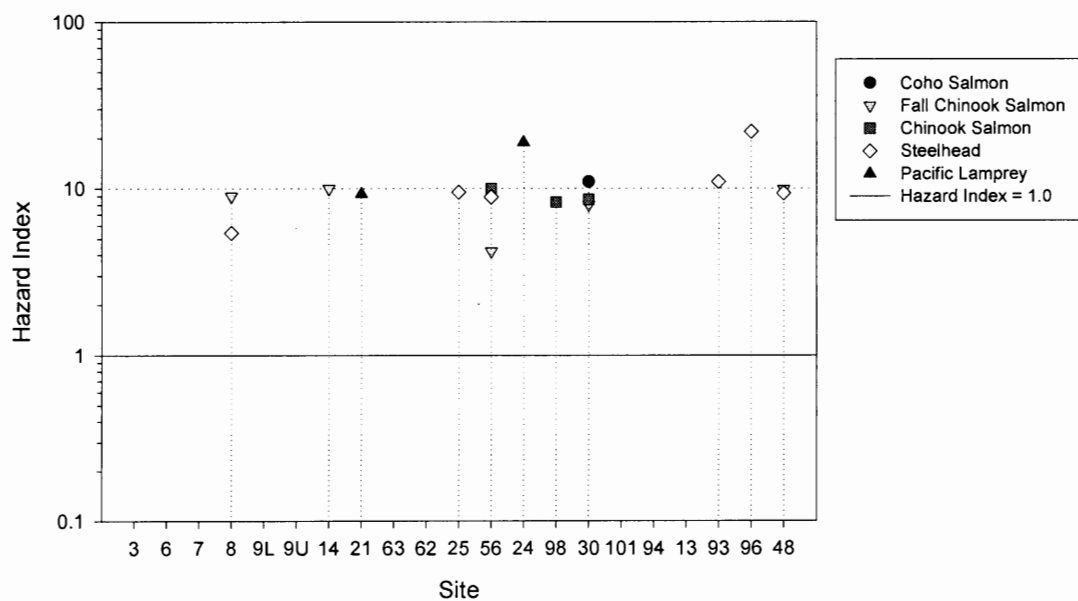


Figure 6-20. Hazard indices for the reproduction/development health endpoint in whole body samples of anadromous fish species by site



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**COLUMBIA RIVER BASIN FISH
CONTAMINANT SURVEY**

**VOLUME I
Appendix N**

Estimated Cancer Risks by Study Site

July 2002

**Prepared by
U.S. Environmental Protection Agency
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Seattle, Washington**

N.1 Cancer Risk Comparisons

Cancer risks were estimated for fish collected in the Columbia River Basin as described in Section 6. Graphical representations of the data are presented in this section to show risk estimates for multiple species, sample types, and sites. Total cancer risk at or above 1×10^{-6} are focused upon in the discussion in this Appendix.

N.1.2 Carcinogenic Risk Estimates

Upper bound total cancer risk estimates are presented graphically across a range of consumption rates from 0.6 g/day to 540 g/day for 30- and 70-year exposure durations. Each graph represents only one sampling site. Assuming a typical meal size of 8 ounces, 0.6 g/day corresponds to a consumption rate of one meal per year. The upper value, 540 g/day, corresponds to 900 meals per year, the maximum suggested fish consumption rate for tribal subsistence fishers within the Columbia River basin (Harris and Harper 1997). This range of consumption rates allows the reader to identify cancer risks associated with personal consumption patterns. Four drop lines are included in the plots to guide the reader in finding the cancer risk estimates corresponding to the consumption rates used in this report. The consumption rate of 7.5 g/day (12 meals/yr) corresponds to an adult in the general public with an average fish consumption rate, 63.2 g/day (103 meals/yr) corresponds to an adult in the CRITFC 's member tribal population with an average fish consumption rate, 142.4 g/day (232 meals/yr) corresponds to an adult in the general public with a high fish consumption rate, and 389 g/day (634 meals/yr) corresponds to an adult in the CRITFC 's member tribal population with a high fish consumption rate.

N.3 Cancer Risk Estimates by Site

N.3.1 Columbia River

Seven sites were sampled in the Columbia River, Sites 3, 6, 7, 8, 9L, 9U, and 14. At two sites in the Columbia River, Site 8 and Site 9U, more than one species with the same tissue type were collected, allowing for comparison of estimated cancer risk among these species.

Site 3 is located between the mouth of the Columbia River and Bonneville Dam. One species and sample type was collected at this site, whole-body samples of eulachon. Estimated cancer risk estimates were at or above 1×10^{-6} at 30- and 70-year exposure durations, except for low consumption rates with a 30-year exposure duration (Figure 6-21).

Site 6 is located between the Bonneville Dam and the Dalles Dam. One species and sample type was collected at this site, fillet samples of white sturgeon. Cancer risk estimates exceeded 1×10^{-6} at 30- and 70-year exposure durations (Figure 6-22).

Site 7 is located between the Dalles Dam and the John Day Dam. Fillet samples of white sturgeon and whole-body samples of walleye were collected at this site. Cancer risk estimates for

both of the fillet and whole-body samples at Site 7 exceeded 1×10^{-6} at 30- and 70-year exposure durations (Figures 6-23 and 6-24).

Site 8 is located between the John Day Dam and the McNary Dam. Fillet samples of three species were collected at this site, fall chinook salmon, steelhead, and white sturgeon. Cancer risk estimates for fillet samples exceeded 1×10^{-6} for all three species at a 70-year exposure duration. At a 30-year exposure duration, cancer risk estimates exceeded 1×10^{-6} except for fall chinook salmon and steelhead at low consumption rates. The highest cancer risk estimates in fillet samples occurred in white sturgeon followed, in decreasing order, by fall chinook salmon and steelhead (Figure 6-25). Whole-body samples of four species were collected at this site, fall chinook salmon, largescale sucker, steelhead, and white sturgeon. Cancer risk estimates for whole-body samples exceeded 1×10^{-6} at a 70-year exposure duration. At a 30-year exposure duration, cancer risk estimates in whole-body samples exceeded 1×10^{-6} except for fall chinook salmon and steelhead at low consumption rates. The highest cancer risk estimates in whole-body samples occurred in white sturgeon, followed, in decreasing order, by largescale sucker, fall chinook salmon, and steelhead (Figure 6-26).

Site 9L is located in the Columbia River below the Snake River. One species was collected at this site, white sturgeon. Cancer risk estimates for fillet and whole-body samples at Site 9L exceeded 1×10^{-6} at 30- and 70-year exposure durations. Cancer risk estimates were slightly higher in fillet samples than in whole-body samples (Figure 6-27).

Site 9U is located in the Upper Columbia River above the Snake River. Three species were collected at this site, largescale sucker, mountain whitefish, and white sturgeon. Cancer risk estimates for fillet and whole-body samples exceeded 1×10^{-6} at 30- and 70-year exposure durations. Mountain whitefish had the highest cancer risk estimates followed, in decreasing order, by white sturgeon, and largescale sucker (Figures 6-28 and 6-29).

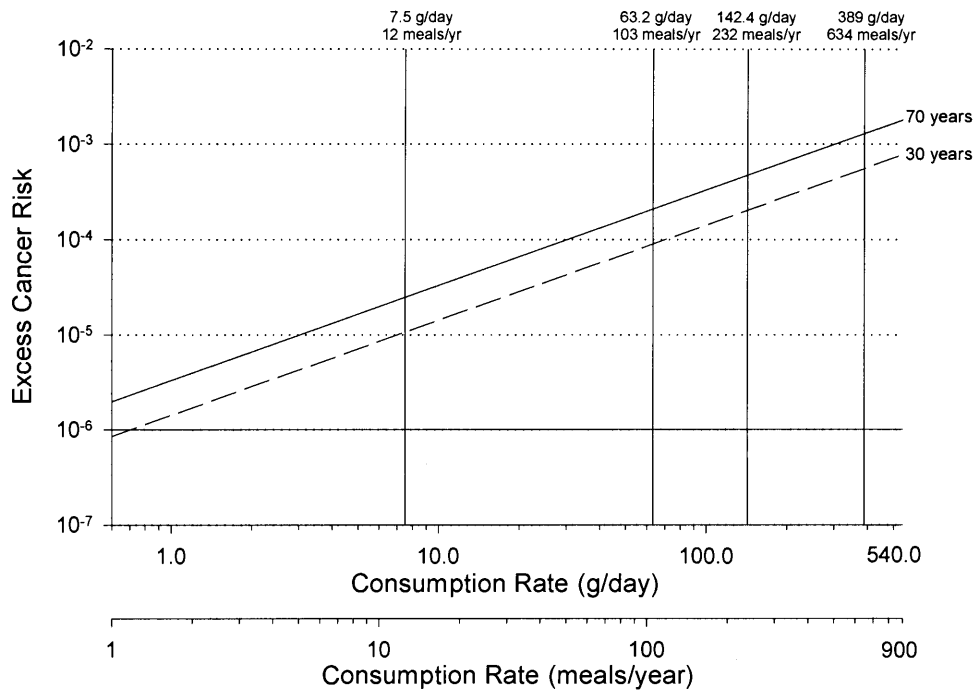


Figure 6-21. Excess cancer risk estimates for whole body samples of eulachon collected at Site 3, Columbia River

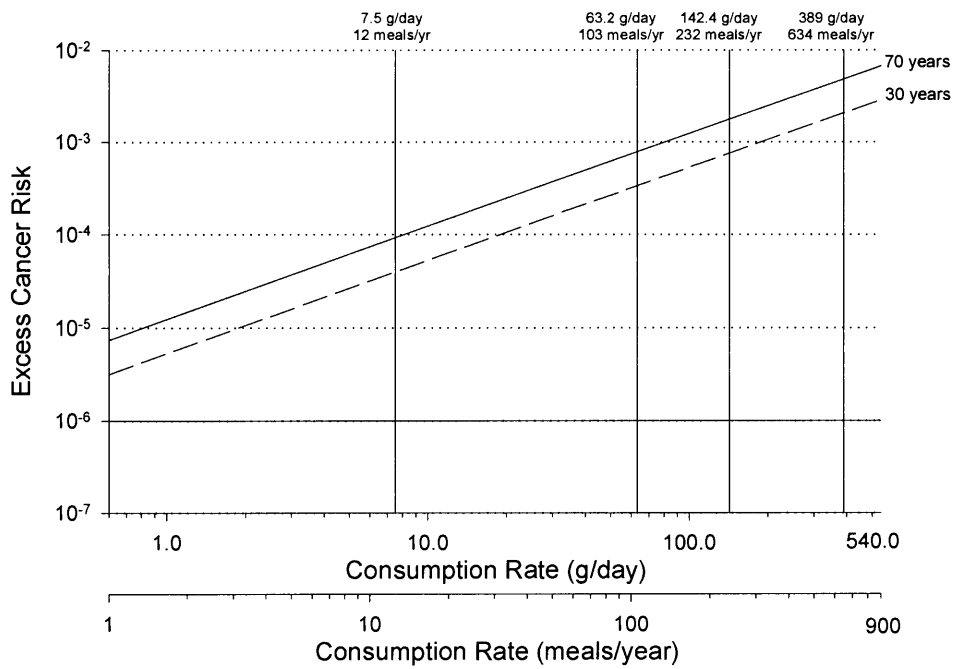


Figure 6-22. Excess cancer risk estimates for fillet samples of white sturgeon collected at Site 6, Columbia River

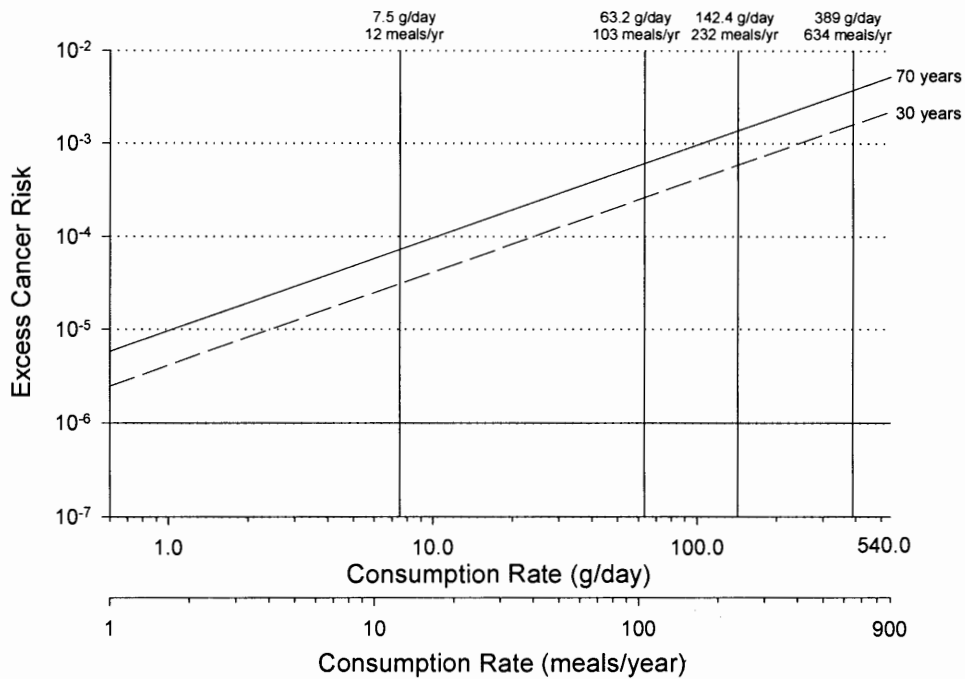


Figure 6-23. Excess cancer risk estimates for fillet samples of white sturgeon collected at Site 7, Columbia River

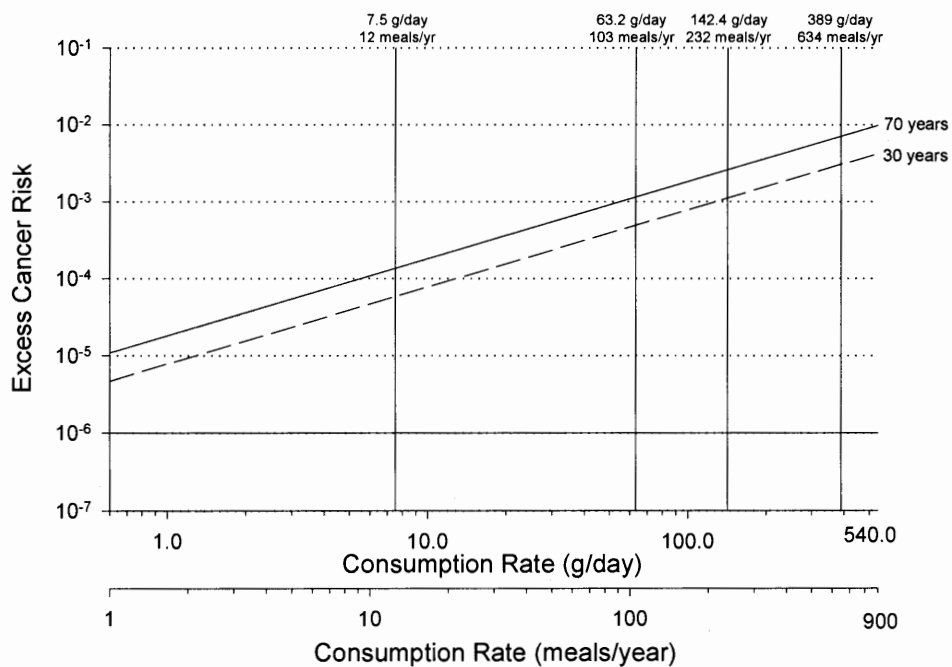


Figure 6-24. Excess cancer risk estimates for whole body samples of walleye collected at Site 7, Columbia River

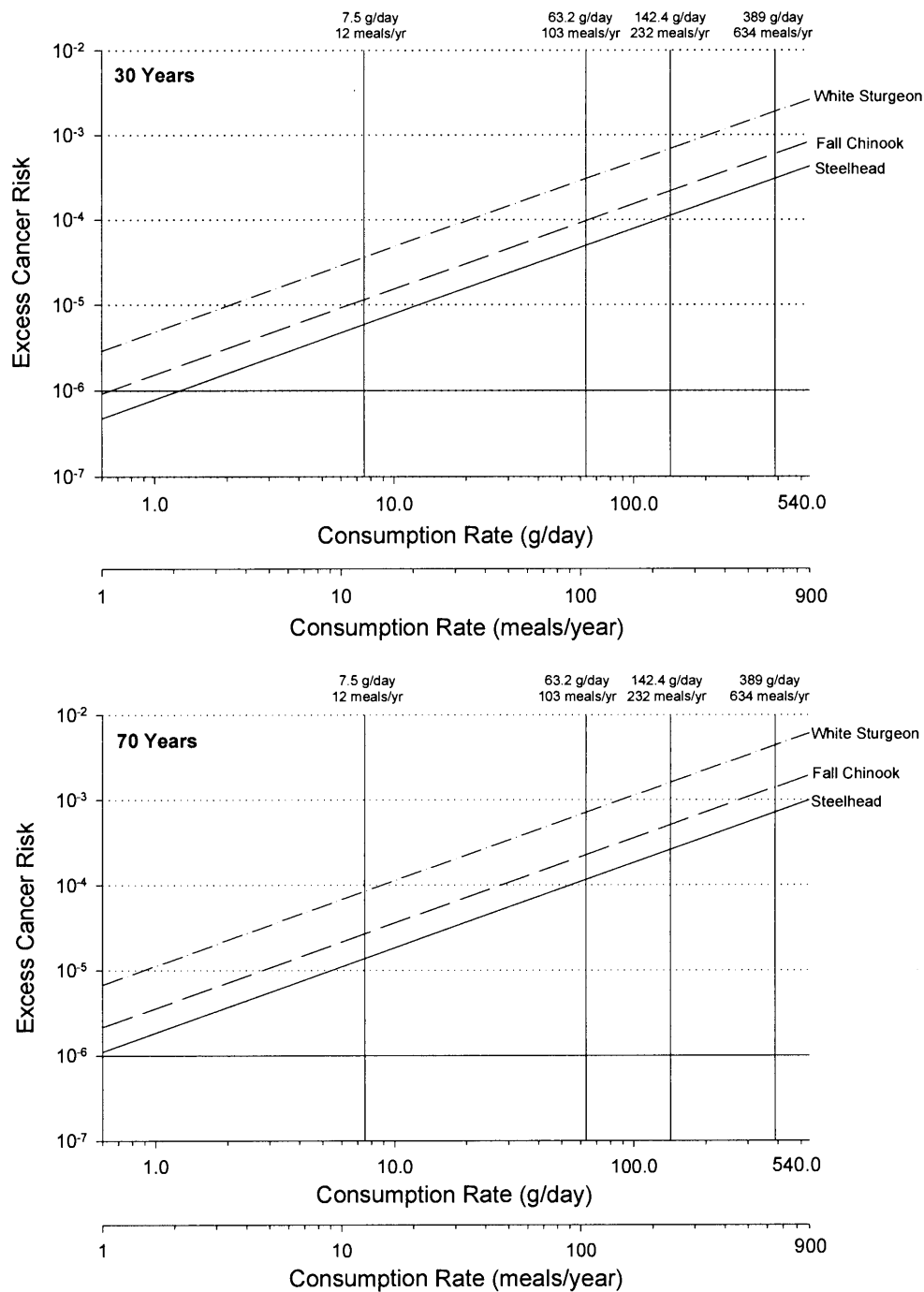


Figure 6-25. Excess cancer risk estimates for fillet samples of fish species collected at Site 8, Columbia River

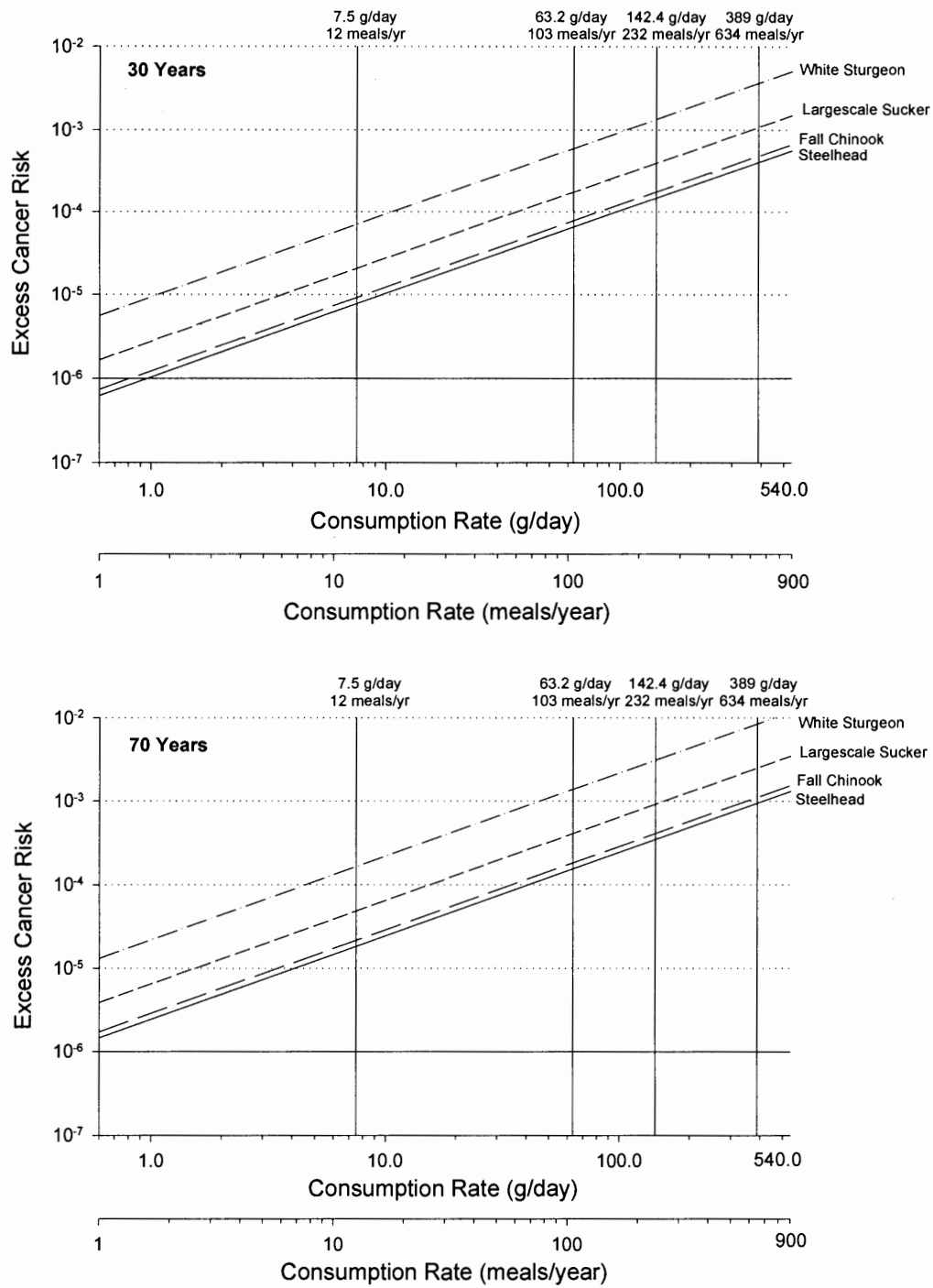


Figure 6-26. Excess cancer risk estimates for whole body samples of fish species collected at Site 8, Columbia River

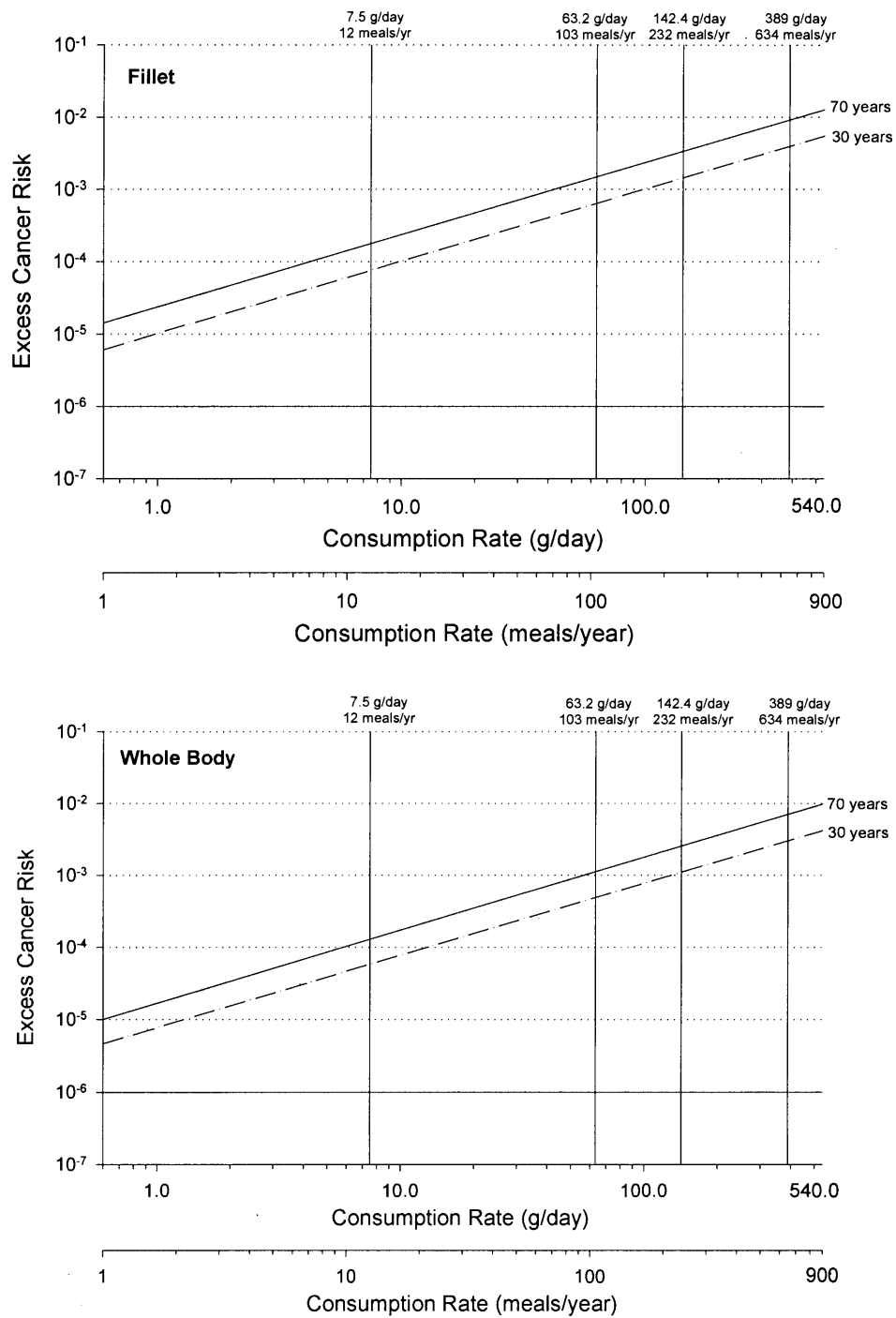


Figure 6-27. Excess cancer risk estimates for samples of white sturgeon collected at Site 9L, Columbia River

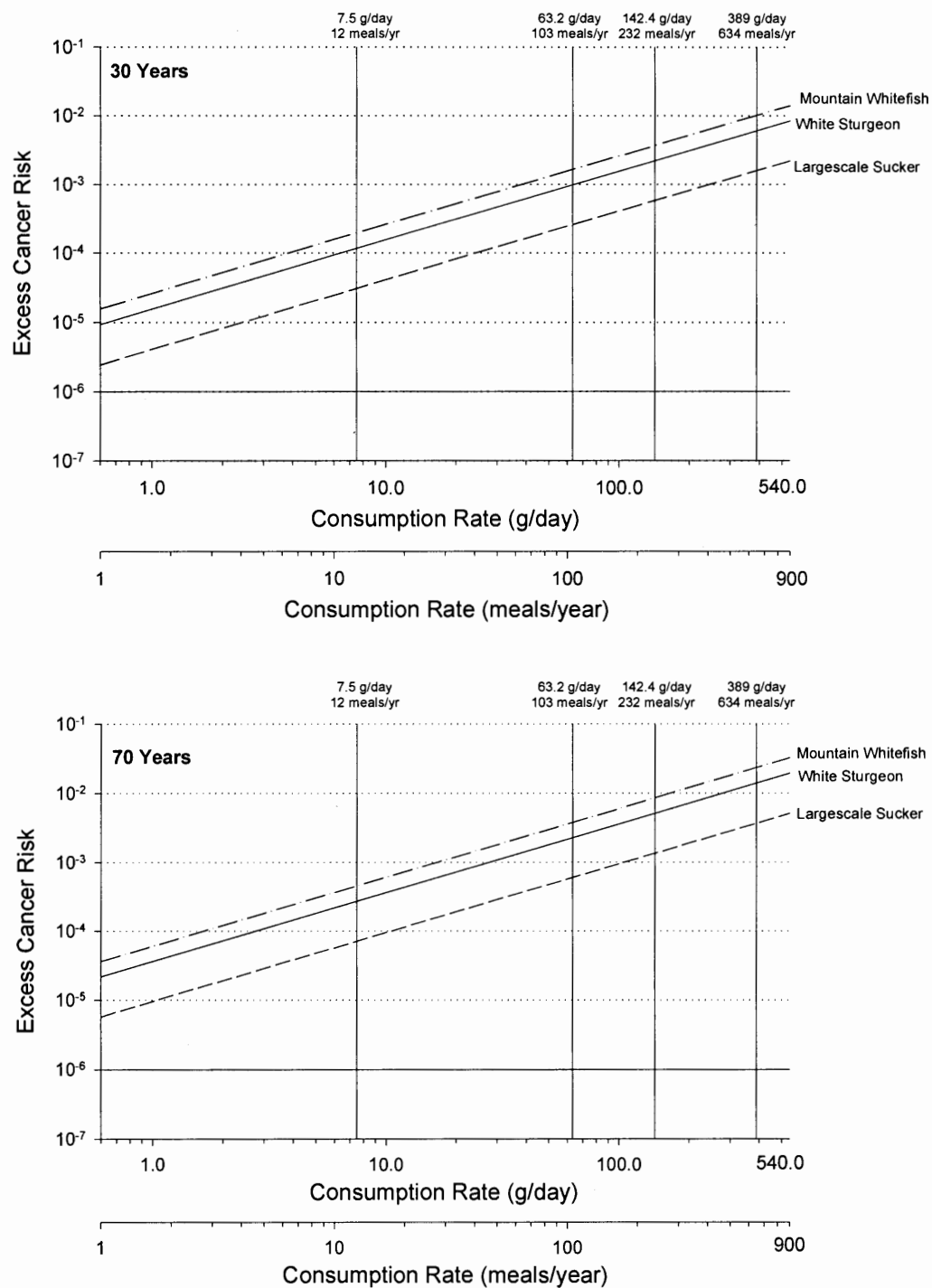


Figure 6-28. Excess cancer risk estimates for fillet samples of fish species collected at Site 9U, Columbia River

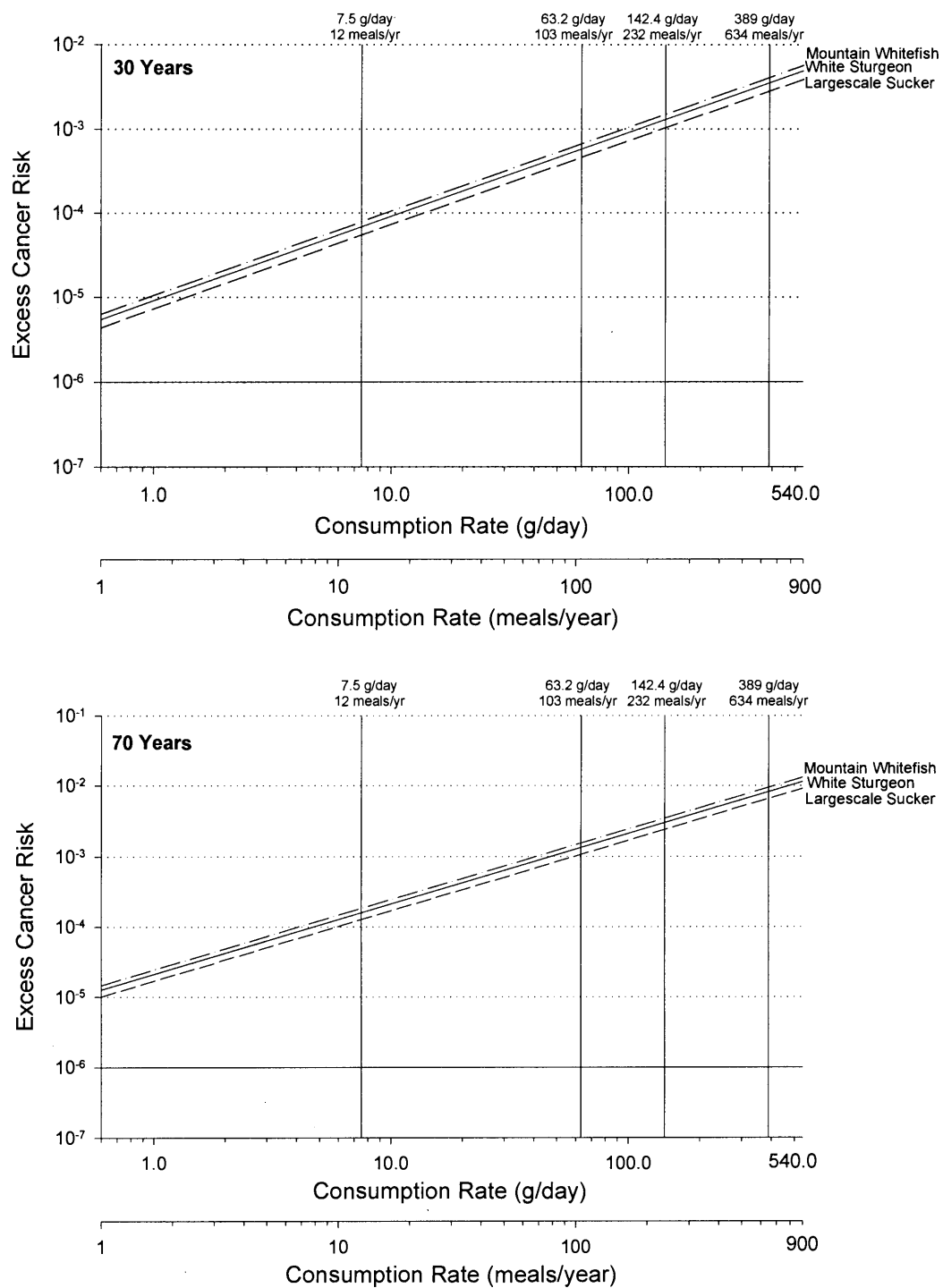


Figure 6-29. Excess cancer risk estimates for whole body samples of fish species collected at Site 9U, Columbia River

Site 14 is located in the Upper Columbia River above the Snake River. One species was collected at this site, fall chinook salmon. Cancer risk estimates for fillet and whole-body samples exceeded 1×10^{-6} at 30- and 70-year exposure durations (Figure 6-30).

N.3.2 Willamette River

One sampling site was located in the Willamette River, site 21. Two species were collected at this site, Pacific lamprey and spring chinook salmon. Cancer risk estimates for fillet samples exceeded 1×10^{-6} at 30- and 70-year exposure durations, except for spring chinook salmon at very low consumption rates with a 30-year exposure duration. The highest cancer risk estimates occurred for Pacific lamprey followed by spring chinook salmon (Figure 6-31 and 6-32). The highest cancer risk estimates occurred for Pacific lamprey followed by spring chinook salmon .

N.3.3 Wind River

One sampling site was located in the Wind River, Site 63. One species was collected at this site, spring chinook salmon. Cancer risk estimates for both fillet and whole-body samples exceeded 1×10^{-6} at 30- and 70-year exposure durations, except for the lowest consumption rates with a 30-year exposure duration (Figure 6-33).

N.3.4 Little White Salmon River

One sampling site was located in the Little White Salmon River, Site 62. One species was collected at this site, spring chinook salmon. Cancer risk estimates for both fillet and whole-body samples exceeded 1×10^{-6} at 30- and 70-year exposure durations, except for low consumption rates with a 30-year exposure duration (Figure 6-34).

N.3.5 Hood River

One sampling site was located in the Hood River. One species was collected at this site, steelhead. Cancer risk estimates for both fillet and whole-body samples exceeded 1×10^{-6} at 30- and 70-year exposure durations. Cancer risk estimates were slightly higher in fillet samples than in whole-body samples (Figure 6-35).

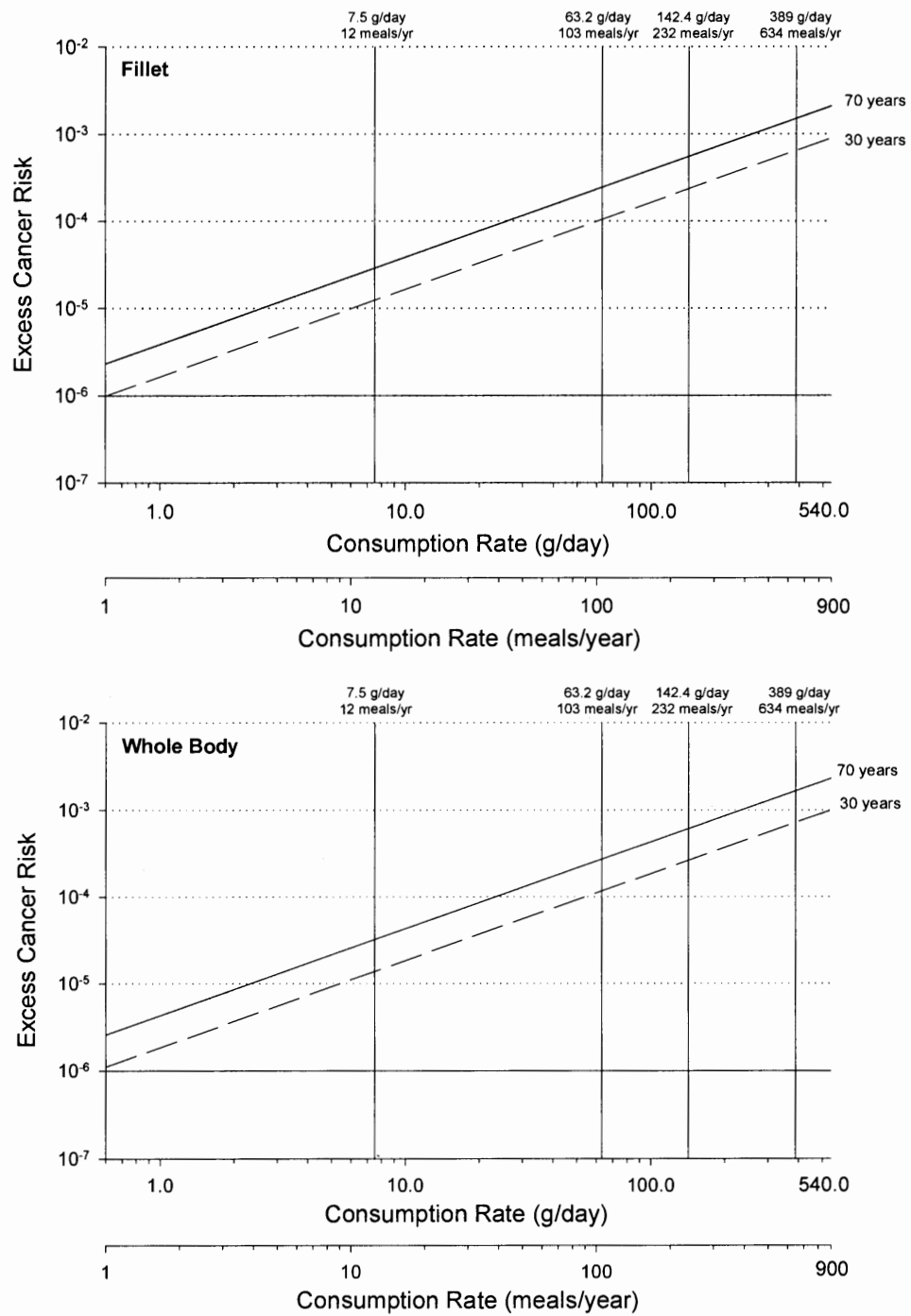


Figure 6-30. Excess cancer risk estimates for samples of fall chinook collected at Site 14, Columbia River

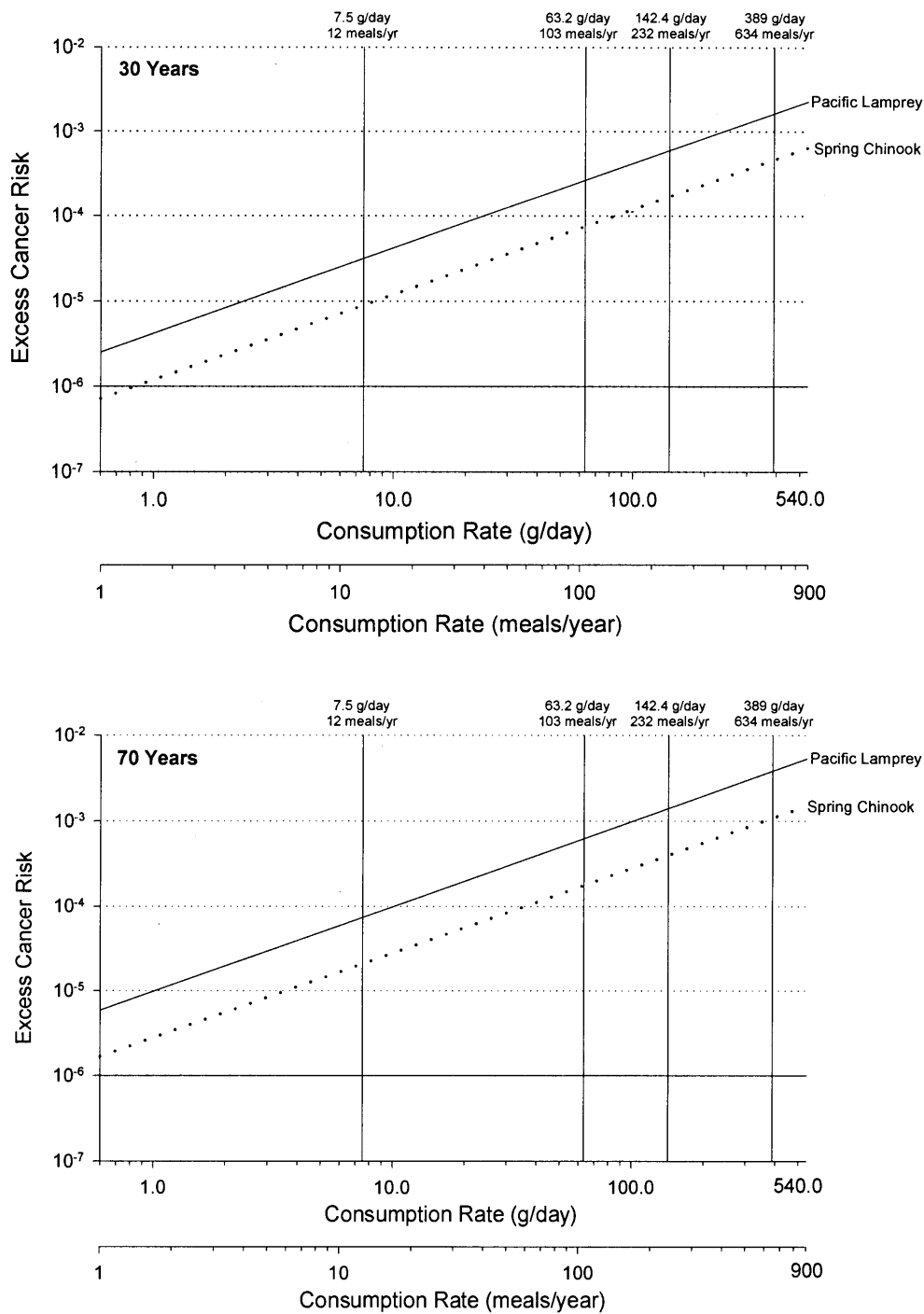


Figure 6-31. Excess cancer risk estimates for fillet samples of fish species collected at Site 21, Willamette River

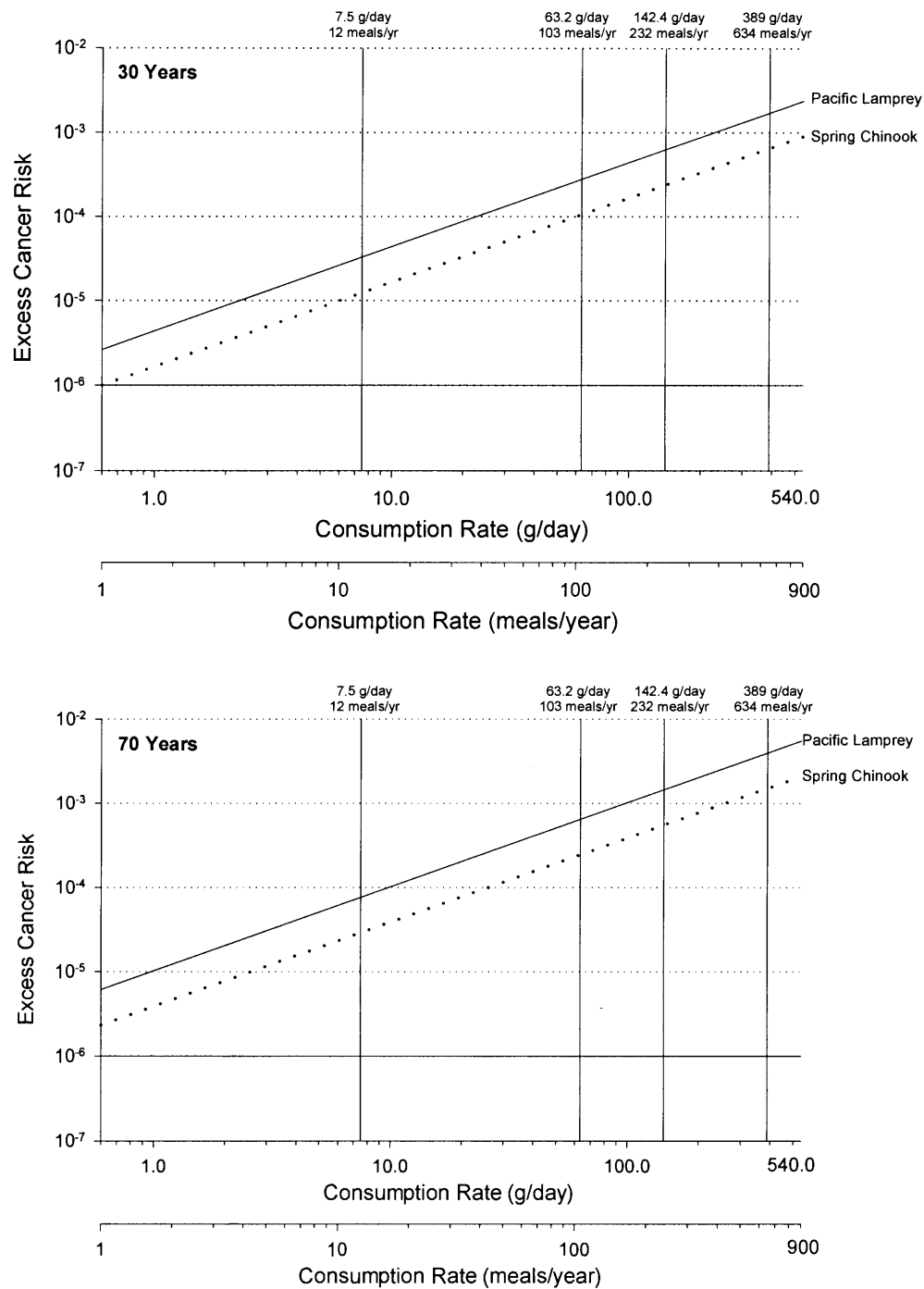


Figure 6-32. Excess cancer risk estimates for whole body samples of fish species collected at Site 21, Willamette River

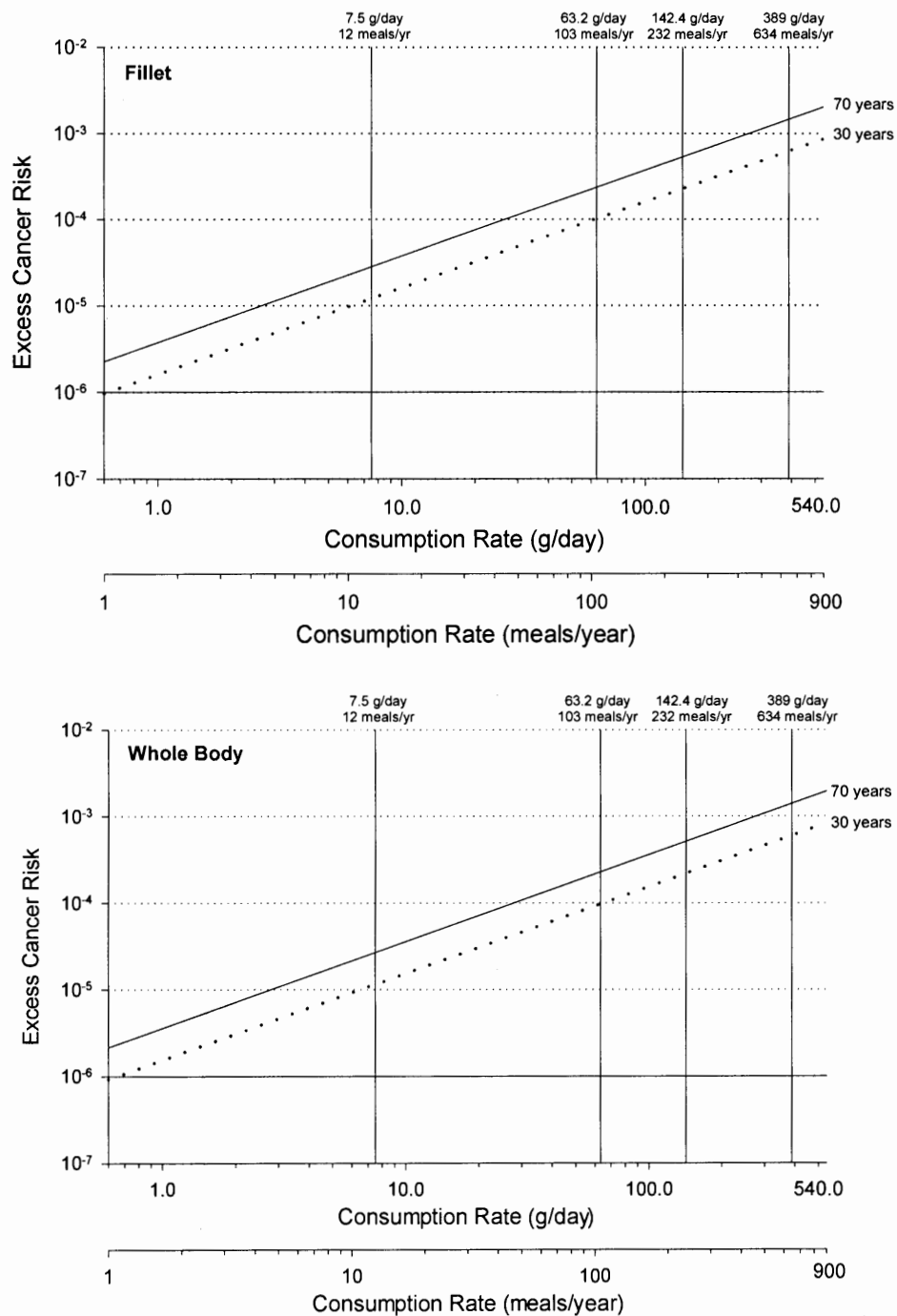


Figure 6-33. Excess cancer risk estimates for samples of spring chinook collected at Site 63, Wind River

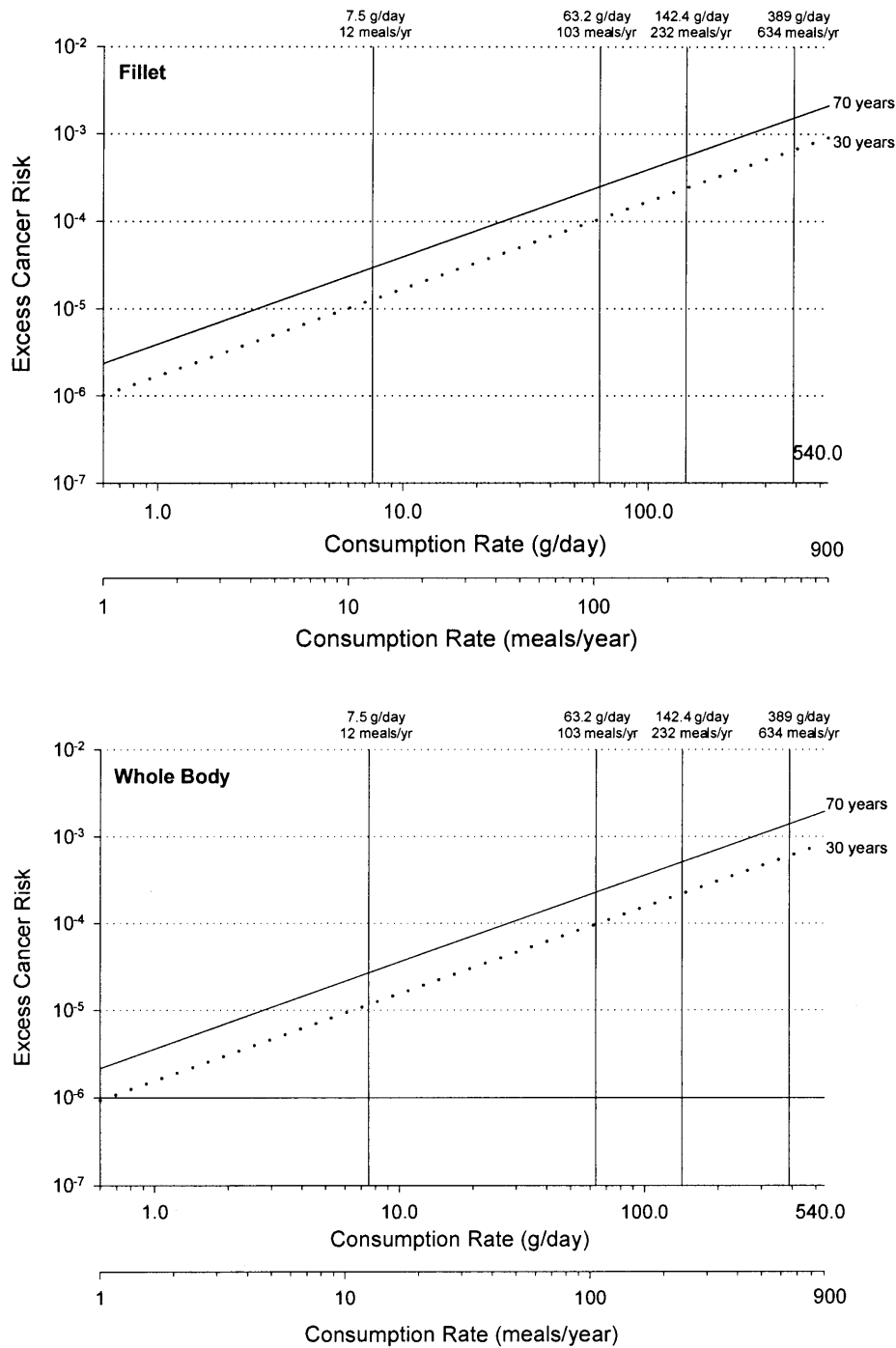


Figure 6-34. Excess cancer risk estimates for samples of spring chinook collected at Site 62, Little White Salmon River

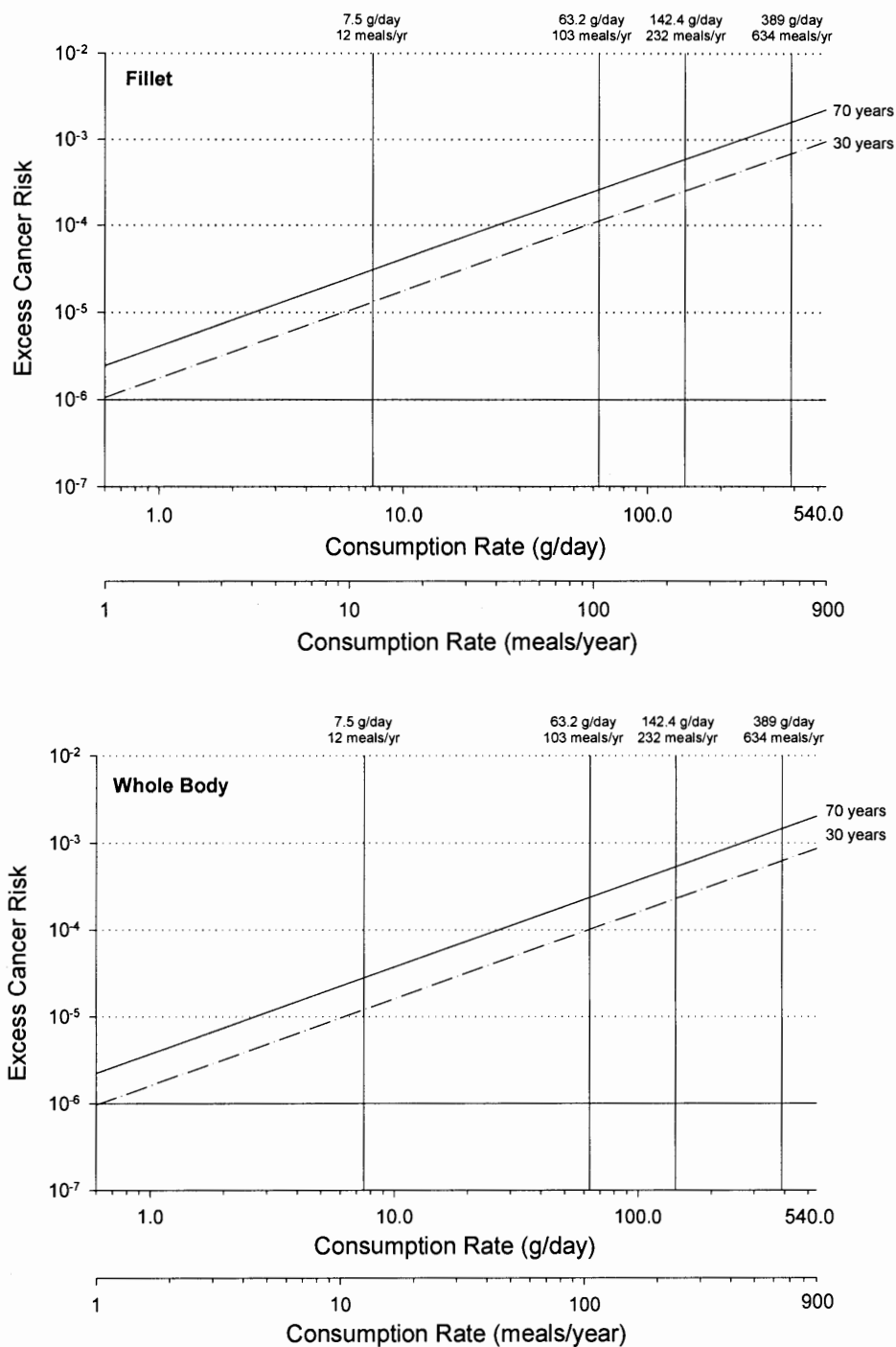


Figure 6-35. Excess cancer risk estimates for samples of steelhead collected at Site 25, Hood River

N.3.6 Klickitat River

One sampling site was located in the Klickitat River, site 56. Three species were collected at this site for fillet samples, fall chinook salmon, spring chinook salmon, and steelhead. Cancer risk estimates for fillet samples exceeded 1×10^{-6} at 70-year exposure durations; 1×10^{-6} was exceeded at 30 years, except for lowest consumption rates. The highest cancer risk estimates occurred for steelhead followed, in decreasing order, by spring chinook salmon and fall chinook salmon (Figure 6-36). Four species were collected at this site for whole-body samples, fall chinook salmon, rainbow trout, spring chinook salmon, and steelhead. Cancer risk estimates for whole-body samples exceeded 1×10^{-6} at 70-year exposure durations; 1×10^{-6} was exceeded at 30 years, except for lowest consumption rates. The highest cancer risk estimates occurred for spring chinook salmon followed, in decreasing order, by steelhead, fall chinook salmon, and rainbow trout (Figure 6-37).

N.3.7 Fifteen Mile Creek

One sampling site was located in Fifteen Mile Creek, site 24. One species and sample type was collected at this site, whole-body samples of Pacific lamprey. Cancer risk estimates exceeded 1×10^{-6} at 30- and 70-year exposure durations (Figure 6-38).

N.3.8 Deschutes River

One sampling site was located in the Deschutes River, site 98. Three species were collected at this site, largescale sucker, mountain whitefish, and rainbow trout. Cancer risk estimates in fillet samples exceeded 1×10^{-6} at a 70-year exposure duration. At a 30-year exposure duration, cancer risk estimates exceeded 1×10^{-6} except in rainbow trout and largescale sucker at low consumption rates. The highest cancer risks estimated in fillet samples occurred for mountain whitefish followed, in decreasing order, by rainbow trout, and largescale sucker (Figure 6-39). Cancer risk estimates in whole-body samples exceeded 1×10^{-6} at 30- and 70-year exposure durations, except for low consumption rates at a 30-year exposure duration in rainbow trout. The highest cancer risk estimates in whole-body samples occurred for mountain whitefish followed, in decreasing order, by largescale sucker and rainbow trout (Figure 6-40).

N.3.9 Umatilla River

Two sampling sites were located in the Umatilla River, Sites 30 and 101. Five species were collected at Site 30, coho salmon, fall chinook salmon, largescale sucker, spring chinook salmon and walleye. Cancer risk estimates in fillet and whole-body samples exceeded 1×10^{-6} at 30- and 70-year exposure durations, except for low consumption rates at a 30-year exposure duration. The highest cancer risk estimates in fillet samples occurred for spring chinook salmon followed, in decreasing order, by coho salmon, largescale sucker, walleye, and fall chinook salmon (Figure 6-41). The highest cancer risk estimates in whole-body samples occurred for spring chinook salmon followed, in decreasing order, by fall chinook salmon, coho salmon, walleye, and largescale sucker (Figure 6-42).

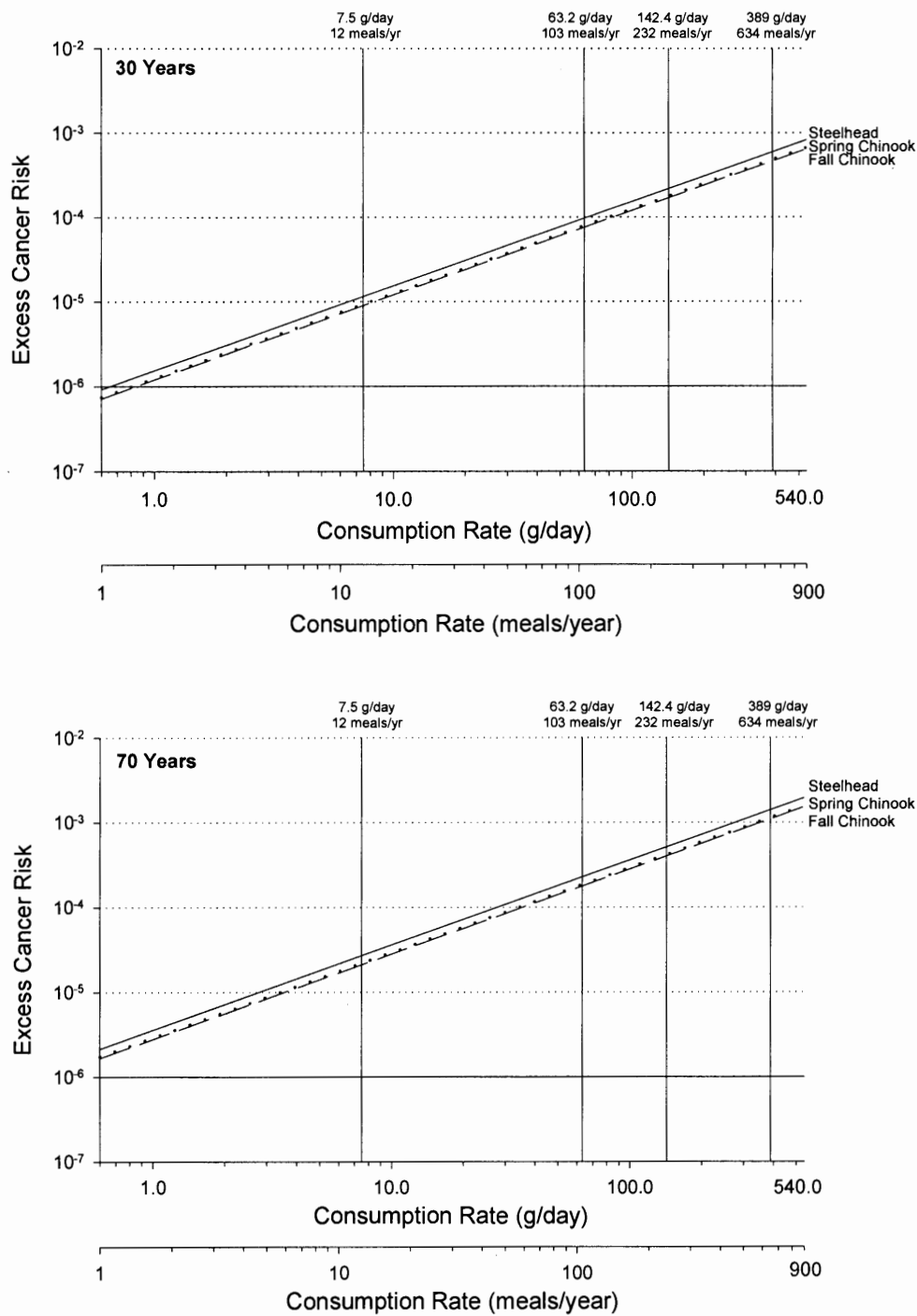


Figure 6-36. Excess cancer risk estimates for fillet samples of fish species collected at Site 56, Klickitat River

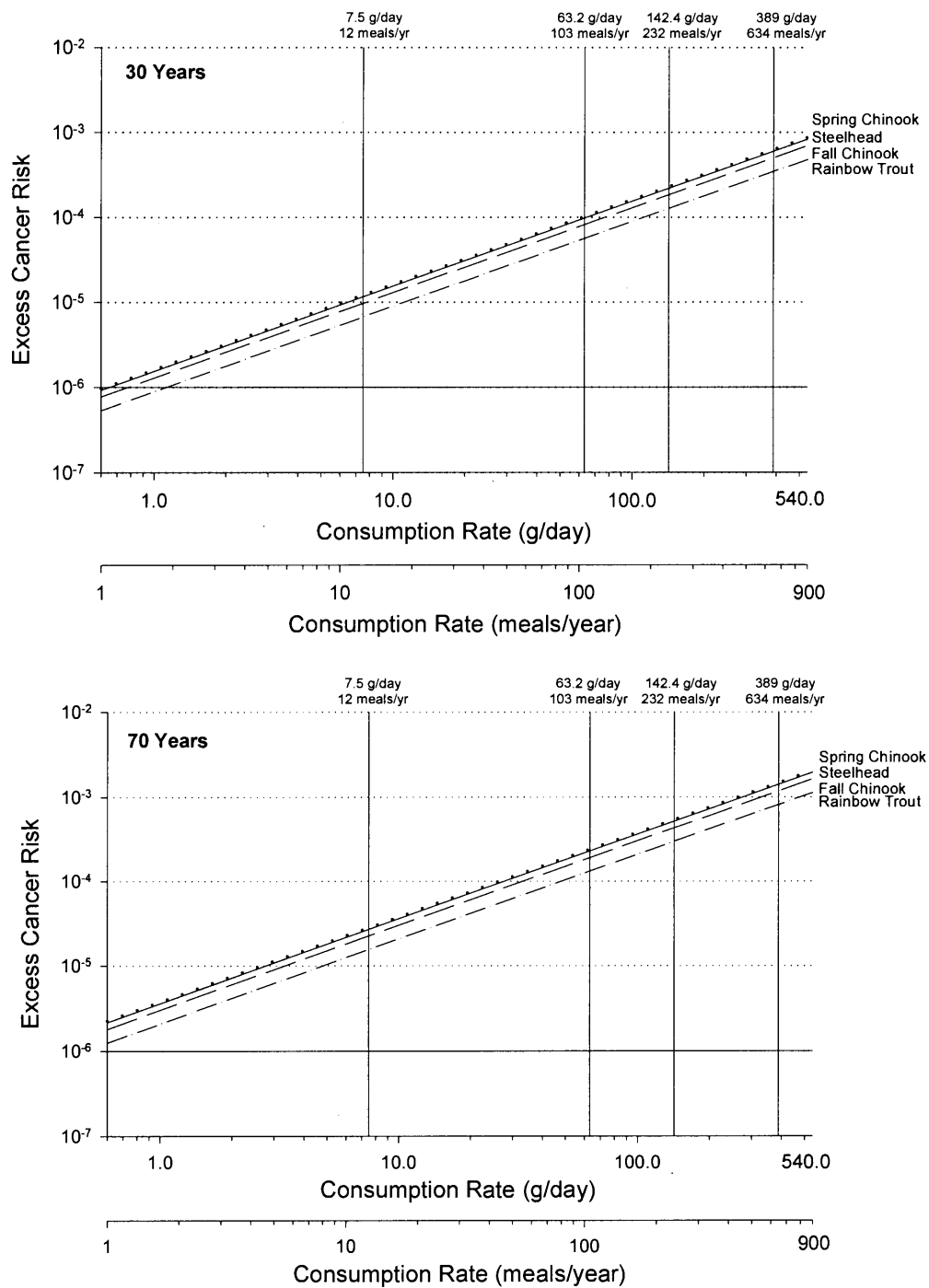


Figure 6-37. Excess cancer risk estimates for whole body samples of fish species collected at Site 56, Klickitat River

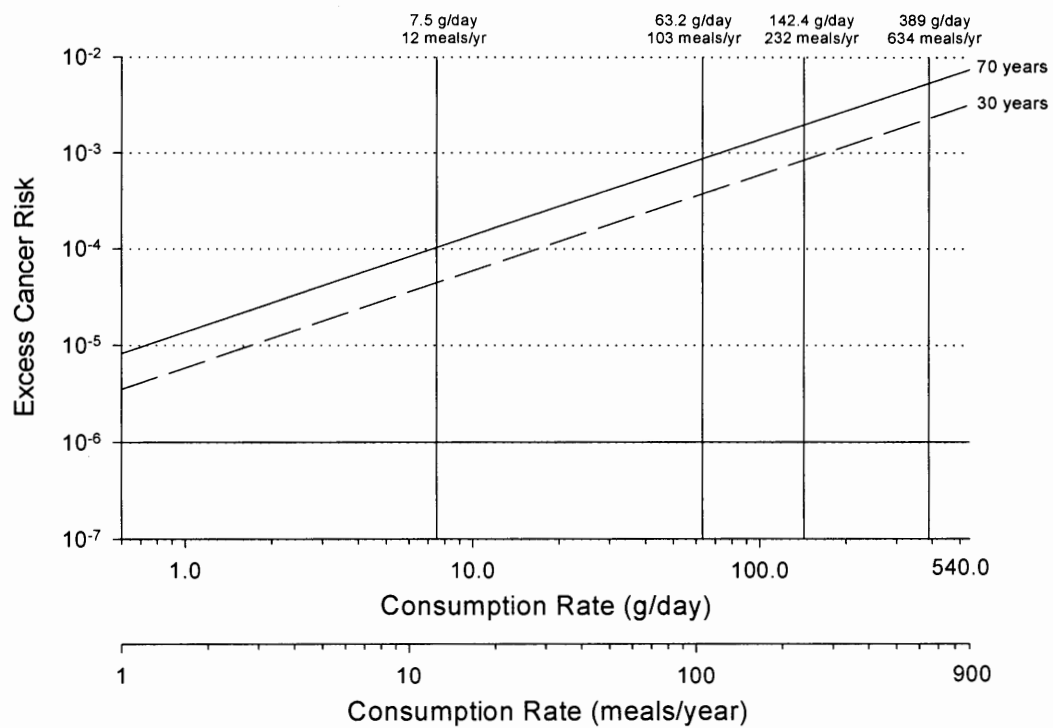


Figure 6-38. Excess cancer risk estimates for whole body samples of Pacific lamprey collected at Site 24, Fifteen Mile Creek

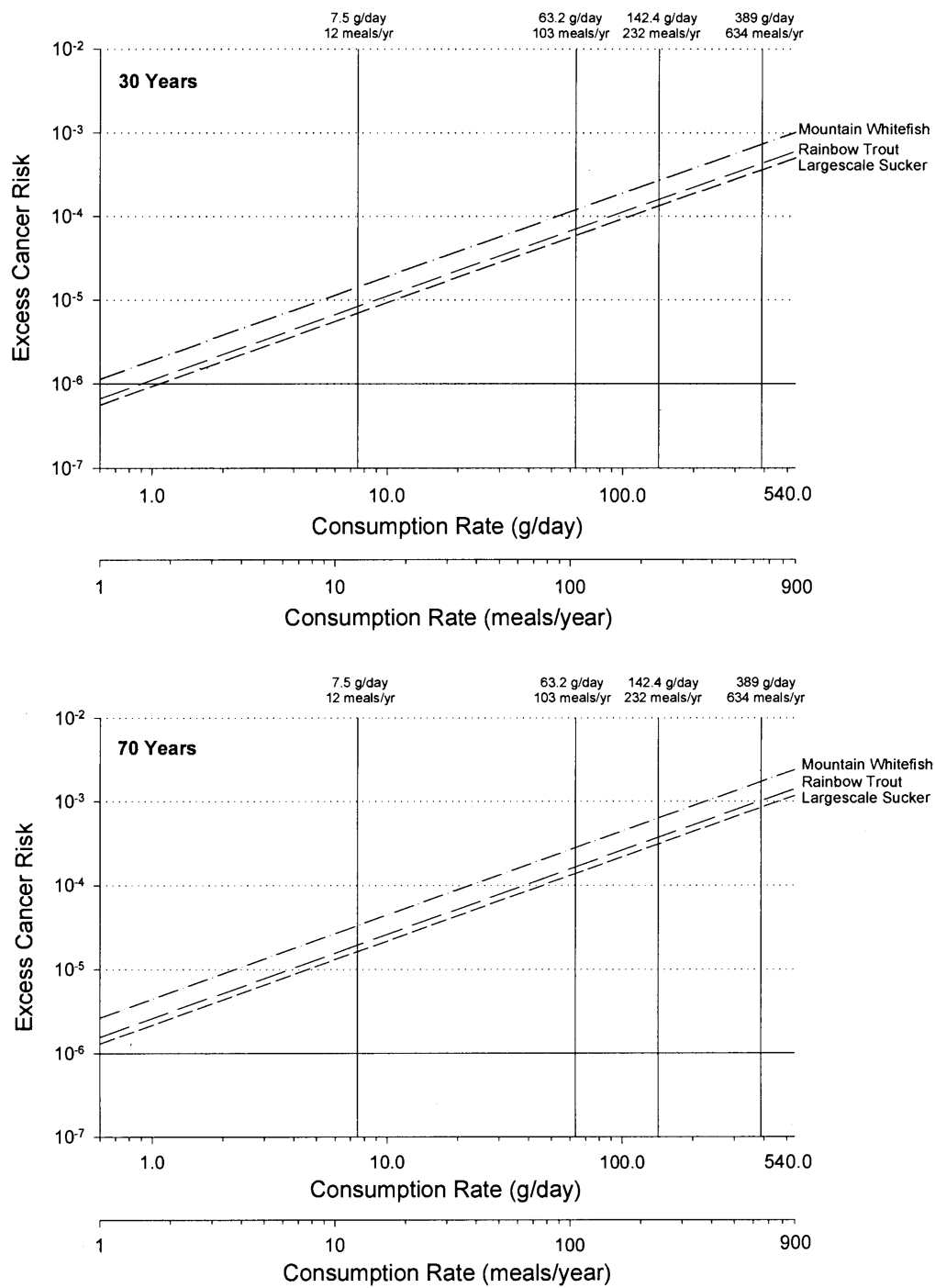


Figure 6-39. Excess cancer risk estimates for fillet samples of fish species collected at Site 98, Deschutes River

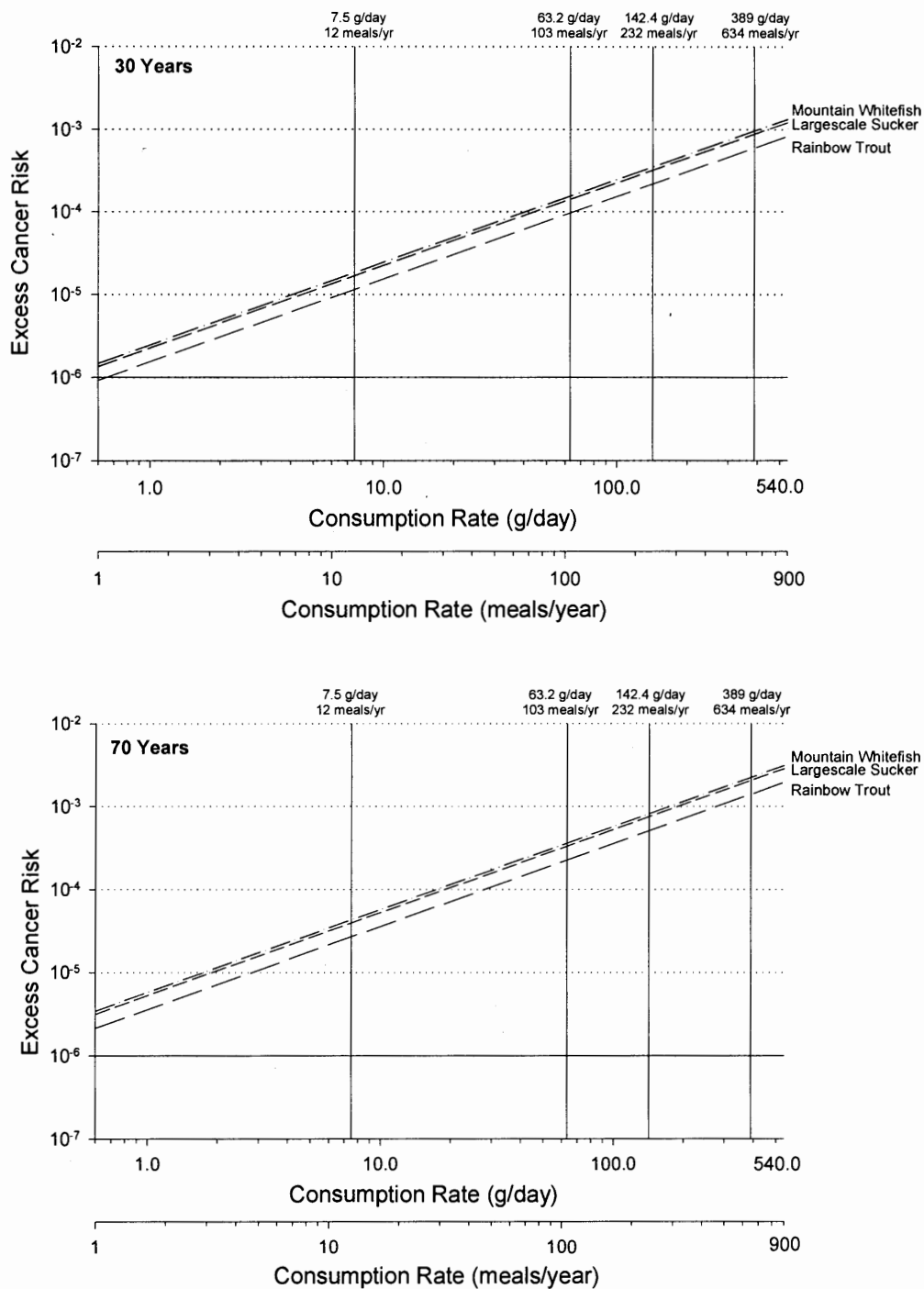


Figure 6-40. Excess cancer risk estimates for whole body samples of fish species collected at Site 98, Deschutes River

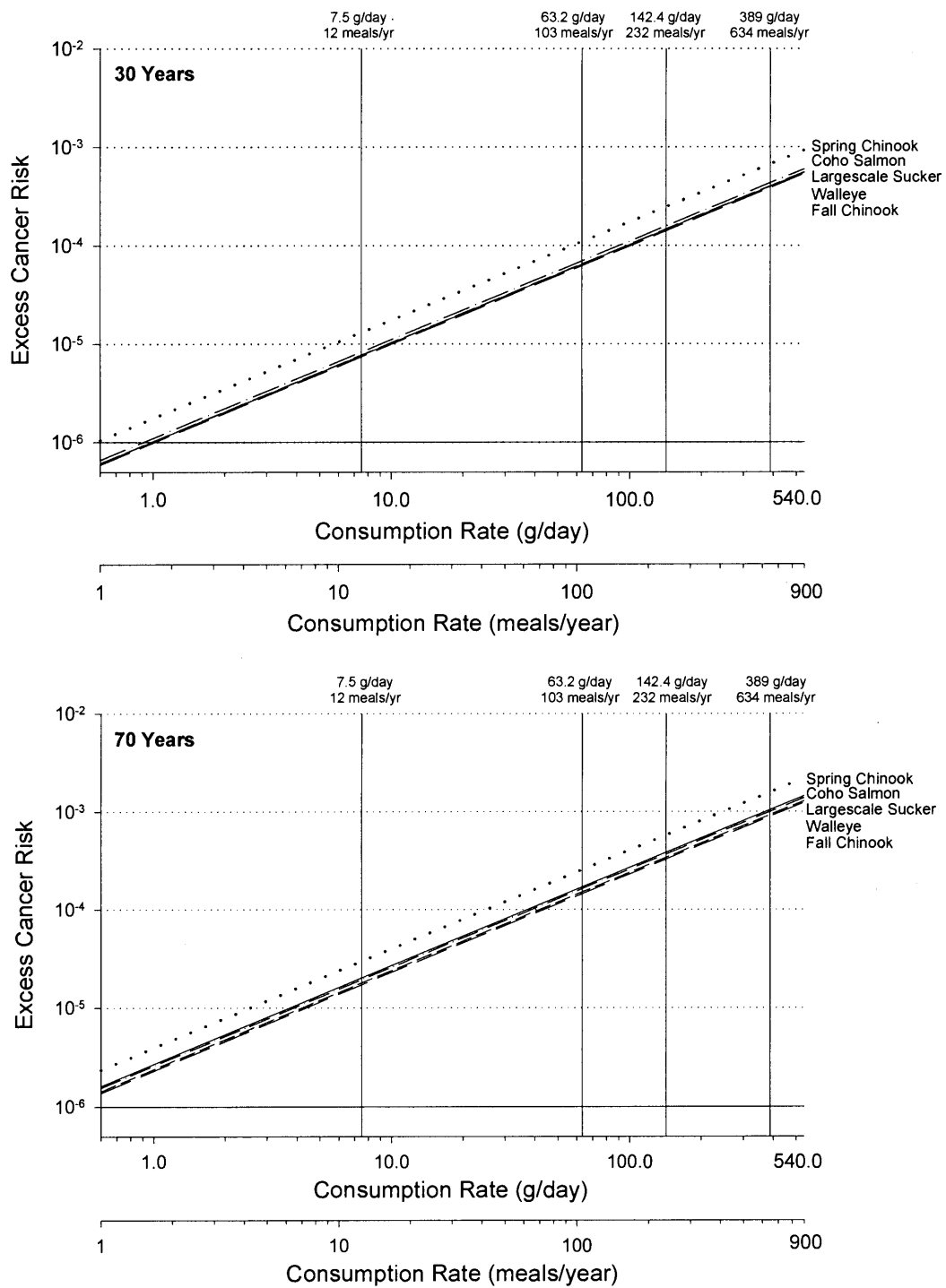


Figure 6-41. Excess cancer risk estimates for fillet samples of fish species collected at Site 30, Umatilla River

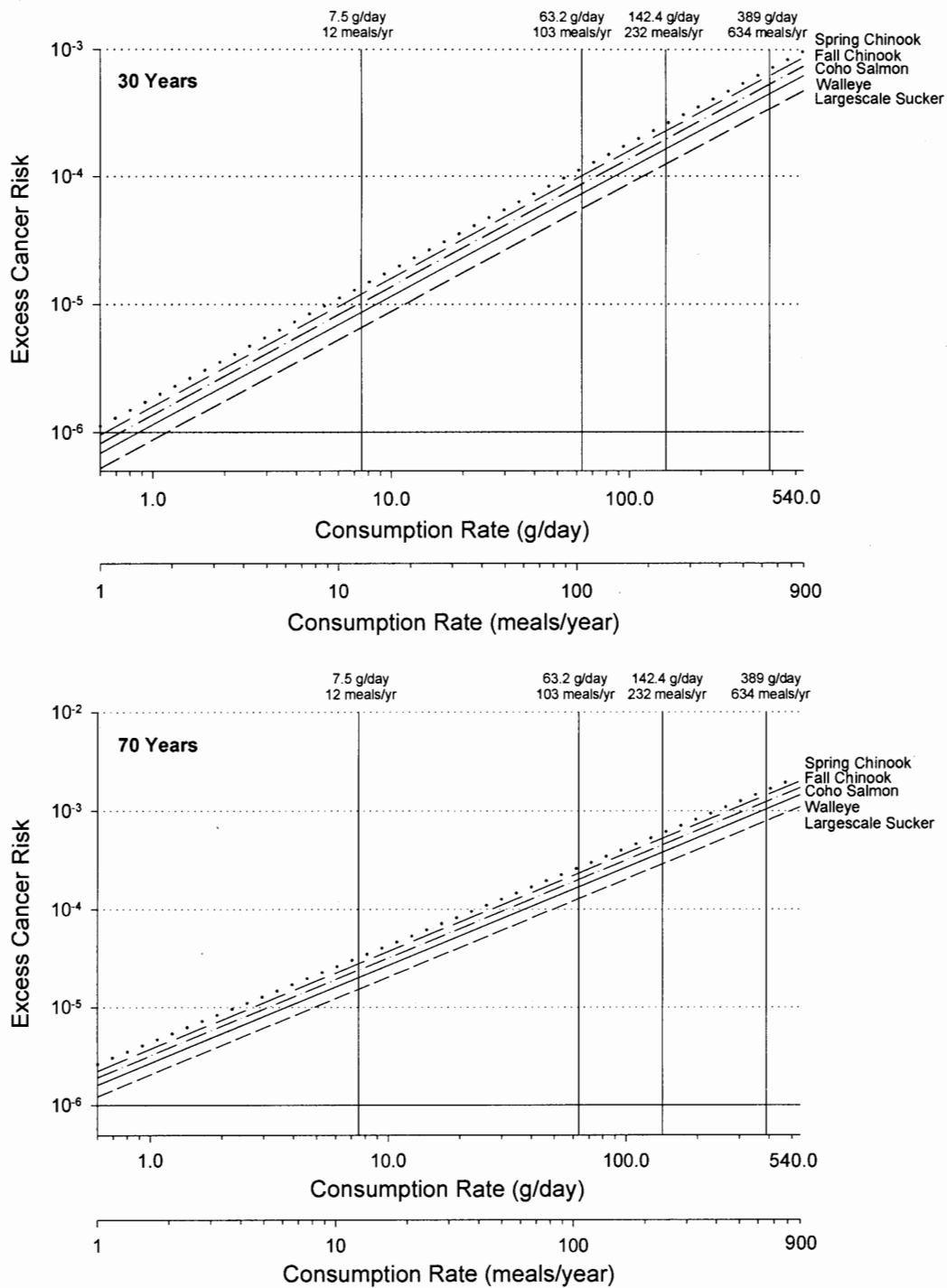


Figure 6-42. Excess cancer risk estimates for whole body samples of fish species collected at Site 30, Umatilla River

Fillet samples of one species were collected at Site 101, mountain whitefish. Cancer risk estimates exceeded 1×10^{-6} at 30- and 70-year exposure durations, except for low consumption rates with a 30-year exposure duration (Figure 6-43). Whole-body samples of two species were collected at this site, mountain whitefish and rainbow trout. Cancer risk estimates exceeded 1×10^{-6} at 30- and 70-year exposure durations, except for low consumption rates with a 30-year exposure duration. The highest cancer risk estimates in whole-body samples occurred for mountain whitefish followed by rainbow trout (Figure 6-44).

N.3.10 Grande Rhonde River

One sampling site was located in the Grande Rhonde River, site 94. One species was sampled at this site, spring chinook salmon. Cancer risk estimates exceeded 1×10^{-6} at 30- and 70-year exposure durations, except at the very lowest consumption rates with a 30-year exposure duration (Figure 6-45).

N.3.11 Snake River

Two sampling sites were located in the Snake River, 13 and 93. Fillet samples of two species were collected at site 13, largescale sucker and white sturgeon. Cancer risk estimates in fillet samples exceeded 1×10^{-6} at 30- and 70-year exposure durations. The highest cancer risk estimates occurred for white sturgeon followed by largescale sucker (Figure 6-46). Whole-body samples of one species, largescale sucker, were collected at site 13. Cancer risk estimates in whole-body samples exceeded 1×10^{-6} at 30- and 70-year exposure durations, except for low consumption rates with a 30-year exposure duration (Figure 6-47). One species was collected at Site 93, steelhead. Cancer risk estimates in fillet samples exceeded 1×10^{-6} at 30- and 70-year exposure durations, except for low consumption rates with a 30-year exposure duration. Cancer risk estimates in whole-body samples exceeded a cancer risk of 1×10^{-6} at 30- and 70-year exposure durations. Cancer risk estimates at site 93 were higher in fillet samples than in whole-body samples (Figure 6-48).

6.3.12 Clearwater River

One sampling site was located in the Clearwater River, site 96. One species was collected at this site, steelhead. Cancer risk estimates for fillet and whole-body samples exceeded 1×10^{-6} at 30- and 70-year exposure durations. Cancer risk estimates were higher in whole-body samples than fillet samples (Figure 6-49).

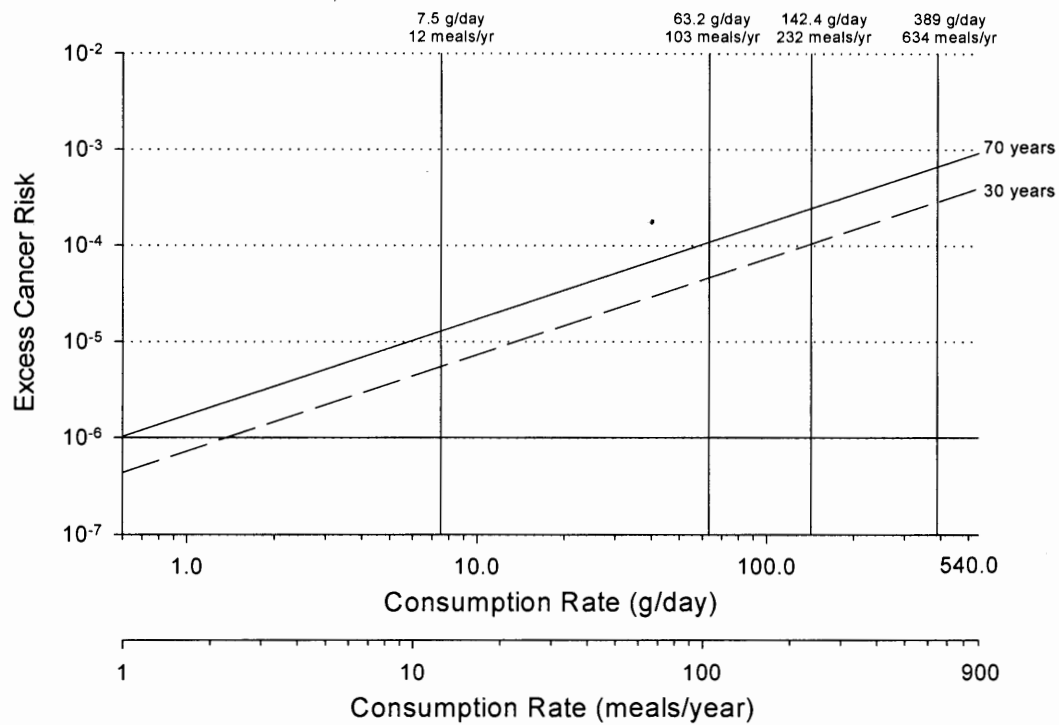


Figure 6-43. Excess cancer risk estimates for fillet samples of mountain whitefish collected at Site 101, Umatilla River

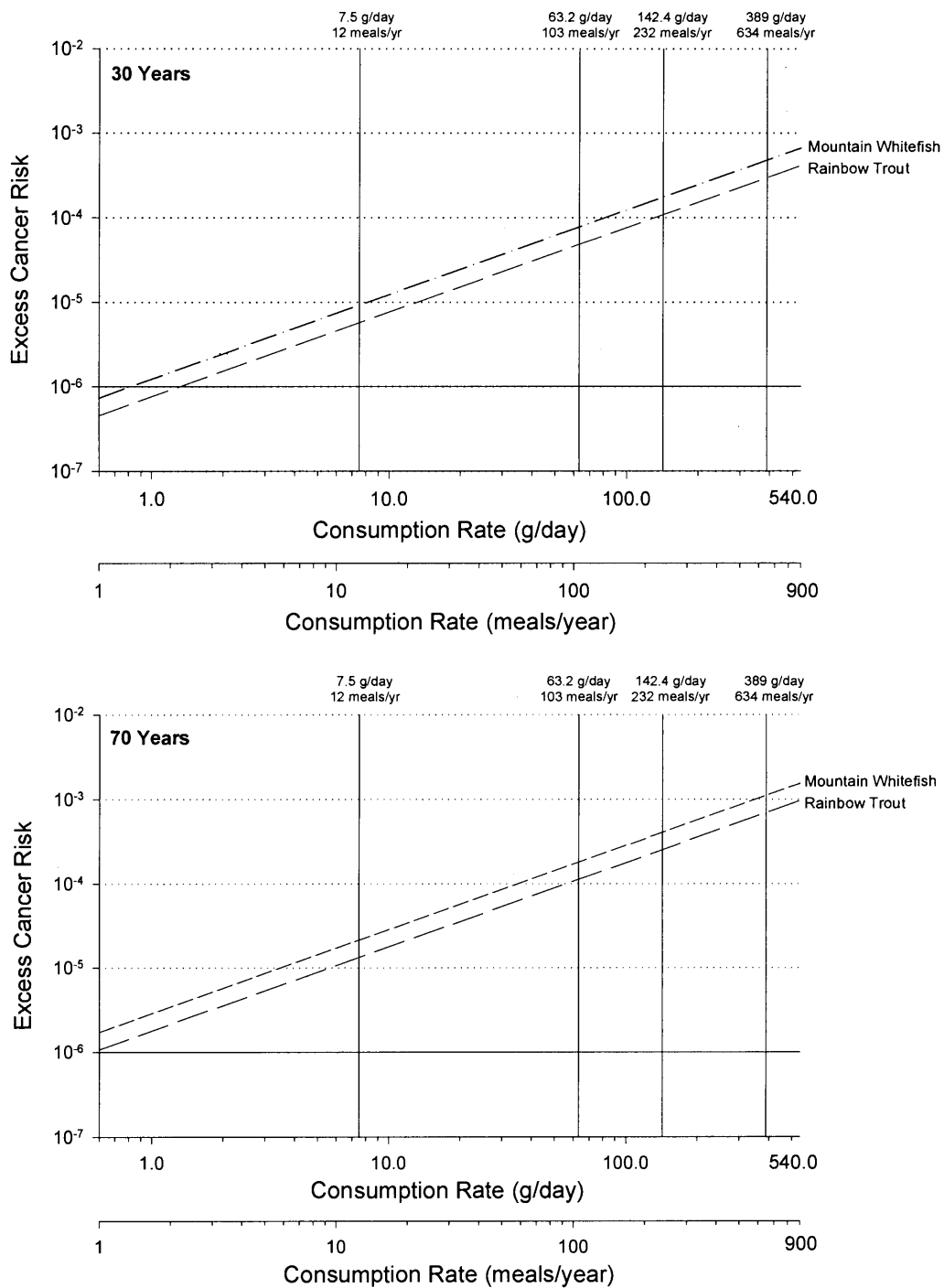


Figure 6-44. Excess cancer risk estimates for whole body samples of fish species collected at Site 101, Umatilla River

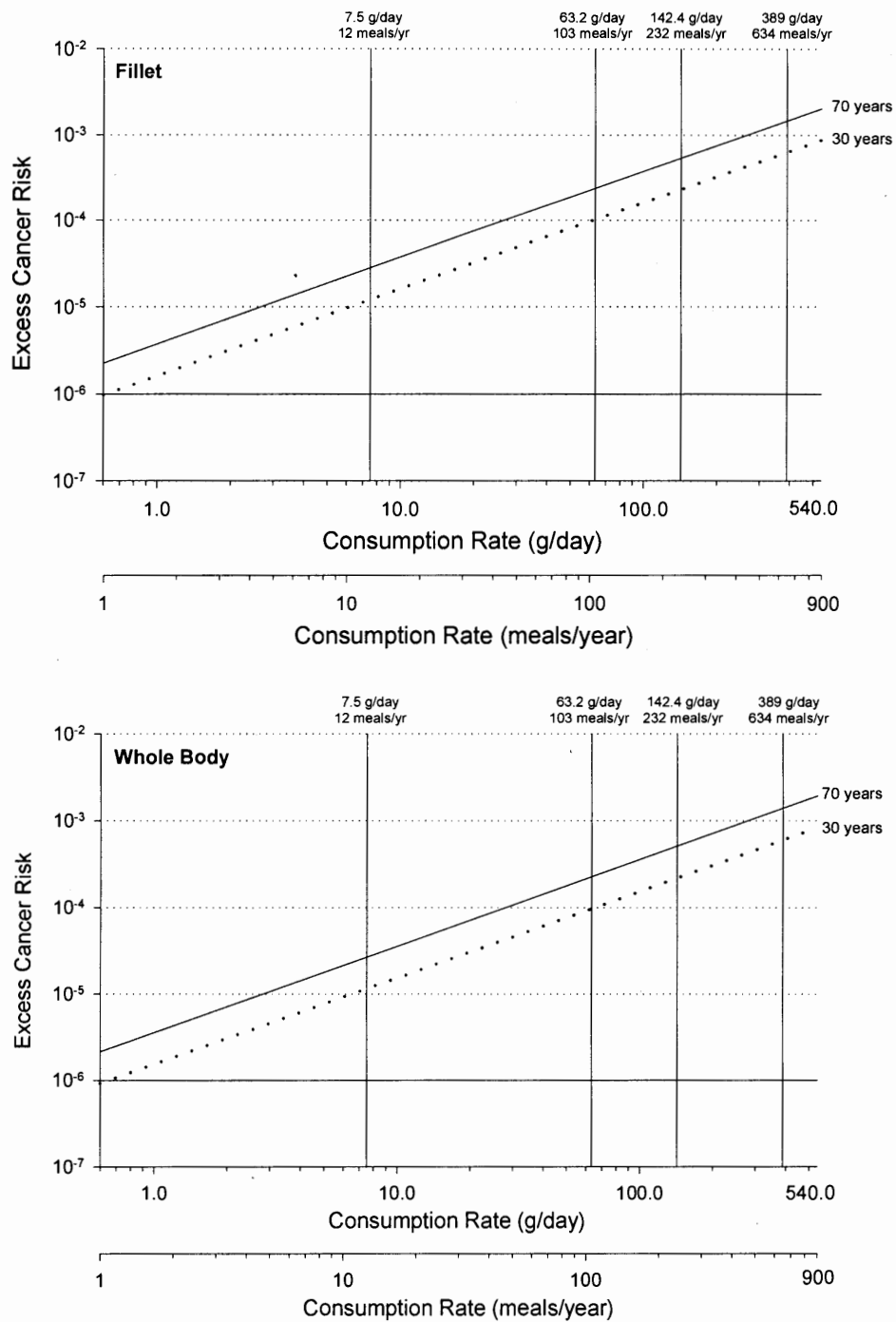


Figure 6-45. Excess cancer risk estimates for fillet and whole body samples of spring chinook collected at Site 94, Grande Rhonde River

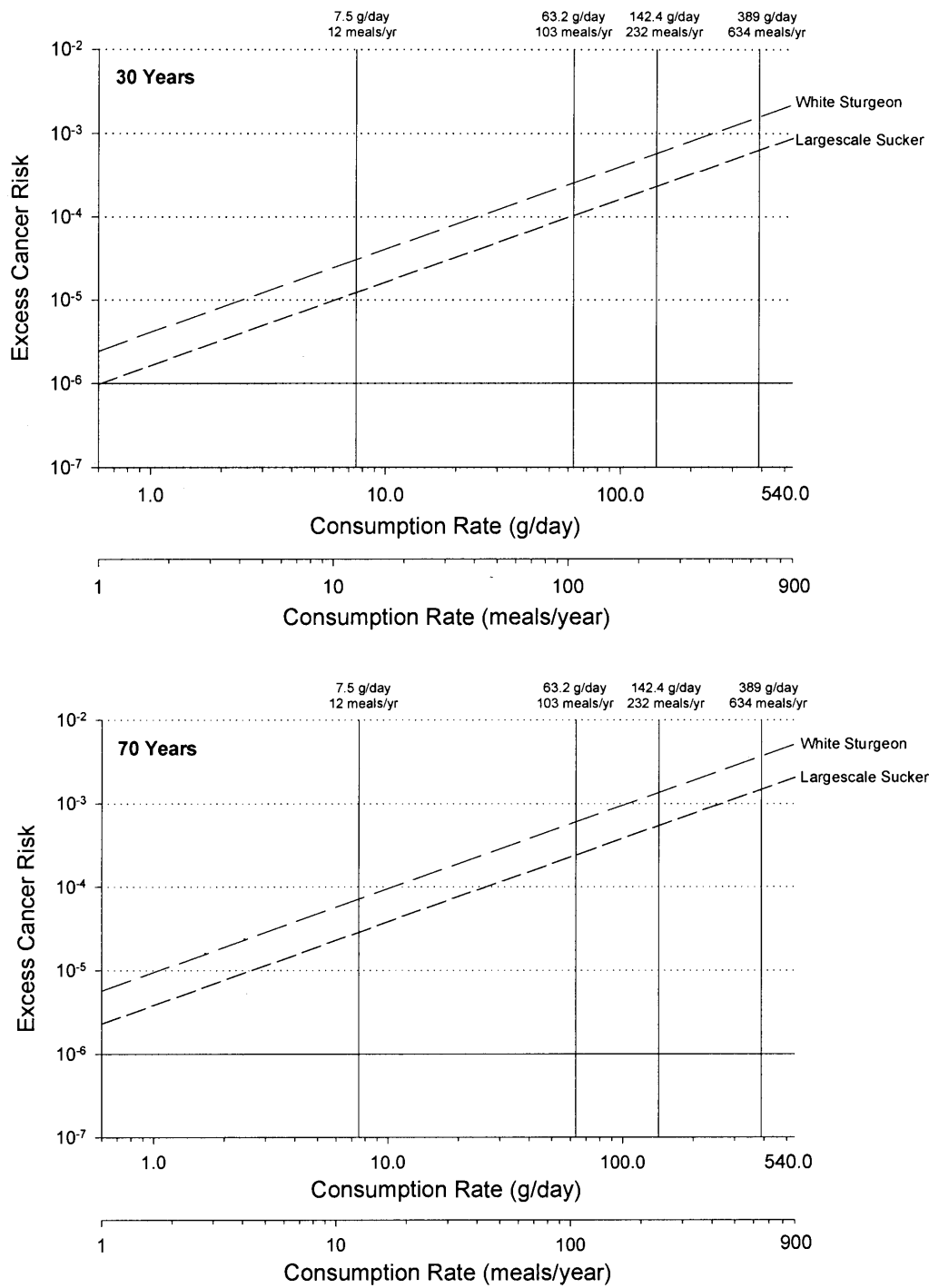


Figure 6-46. Excess cancer risk estimates for fillet samples of fish species collected at Site 13, Snake River

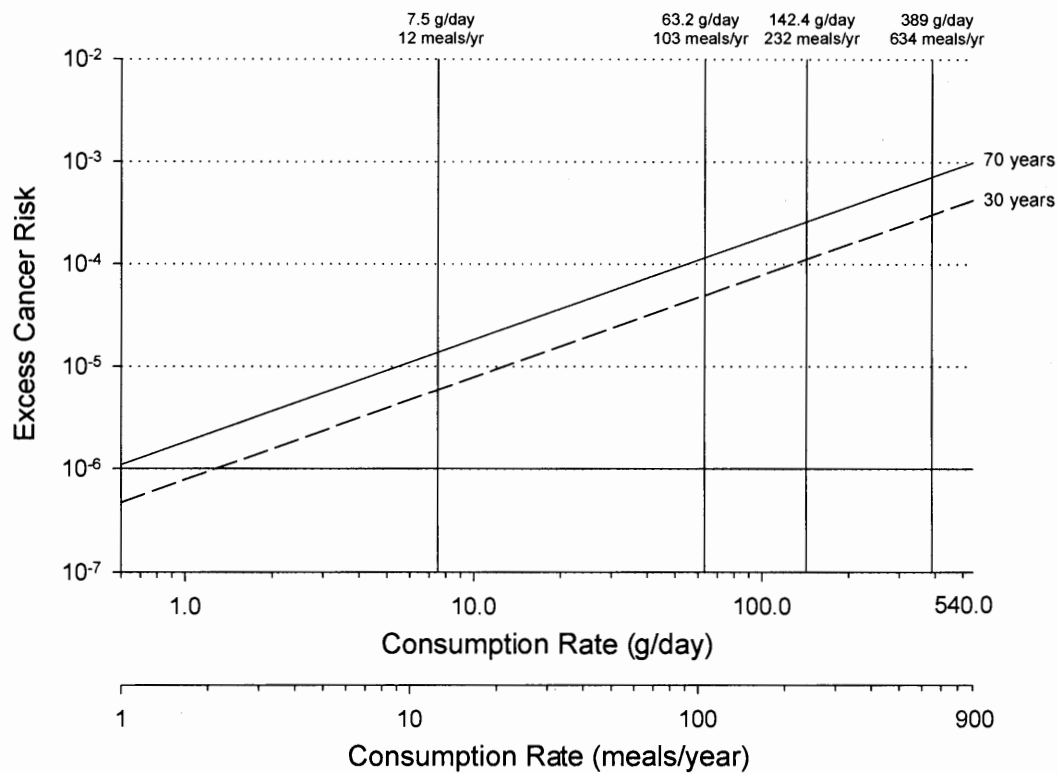


Figure 6-47. Excess cancer risk estimates for whole body samples of largescale sucker collected at Site 13, Snake River

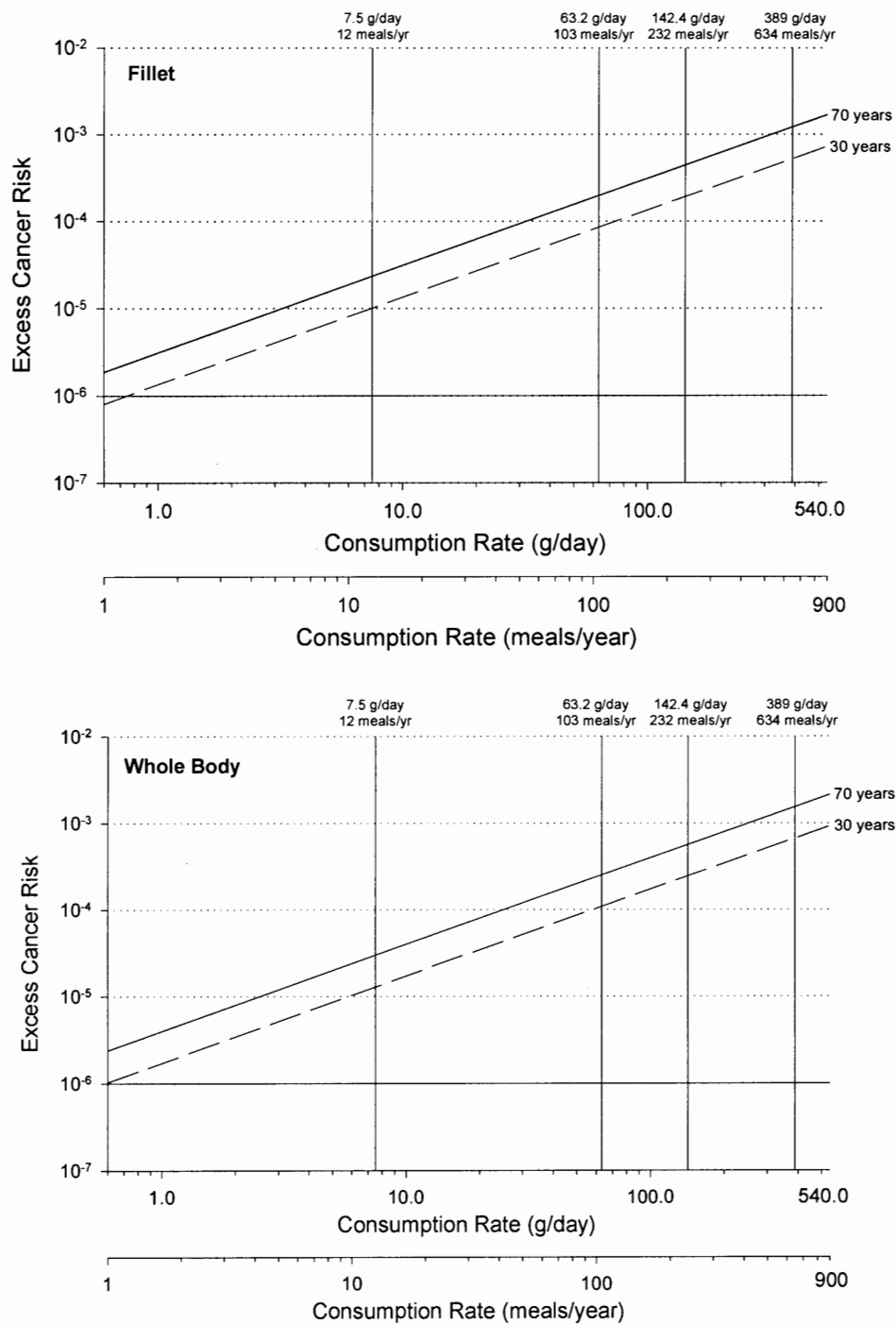


Figure 6-48. Excess cancer risk estimates for samples of steelhead collected at Site 93, Snake River

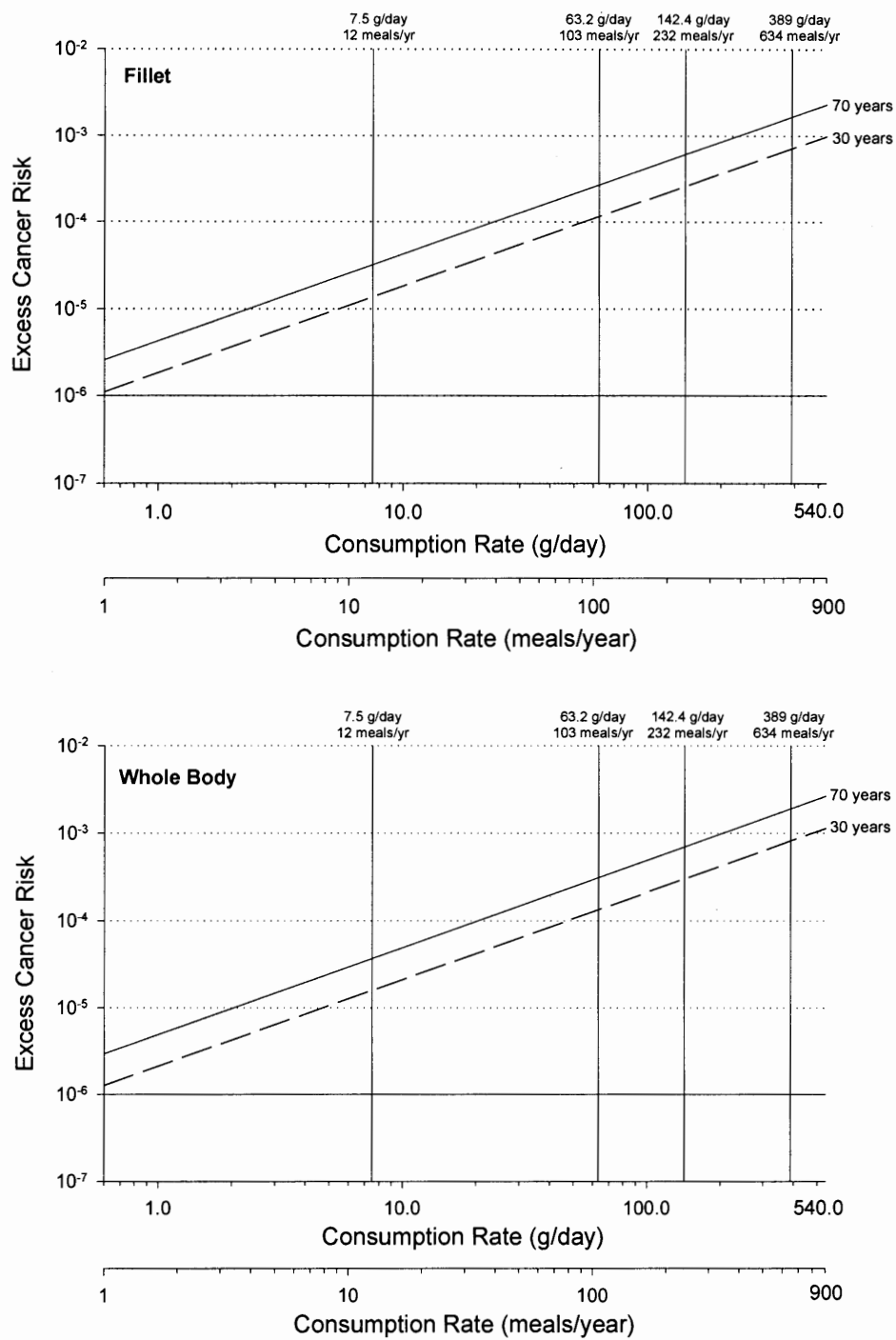


Figure 6-49. Excess cancer risk estimates for steelhead collected at Site 96, Clearwater River

6.3.13 Yakima River

Two sampling sites were located in the Yakima River, Site 48 and Site 49. Fillet samples of five species were collected at Site 48, fall chinook salmon, largescale sucker, mountain whitefish, spring chinook salmon, and steelhead. Cancer risk estimates exceeded 1×10^{-6} at 30- and 70-year exposure durations, except for low consumption rates with a 30-year exposure duration in spring chinook salmon, fall chinook salmon, and steelhead. The highest cancer risk estimates in fillet samples occurred for mountain whitefish followed, in decreasing order, by largescale sucker, spring chinook salmon, fall chinook salmon, and steelhead (Figure 6-50). Whole-body samples of six species were collected at Site 48, bridgelip sucker, fall chinook salmon, largescale sucker, mountain whitefish, spring chinook salmon, and steelhead. Cancer risk estimates exceeded 1×10^{-6} at 30- and 70-year exposure durations, except for low consumption rates with a 30-year exposure duration in fall chinook salmon and steelhead. The highest cancer risk estimates in whole-body samples occurred for mountain whitefish followed, in decreasing order, by largescale sucker, bridgelip sucker, spring chinook salmon, fall chinook salmon, and steelhead (Figure 6-51).

Two species were collected at Site 49, largescale sucker and rainbow trout. Cancer risk estimates in fillet and whole-body samples exceeded 1×10^{-6} at 30- and 70-year exposure durations, except for low consumption rates with a 30-year exposure duration in rainbow trout. The highest cancer risk estimates in fillet and whole-body samples occurred for largescale sucker followed by rainbow trout (Figures 6-52 and 6-53).

6.3.14 Wenatchee River

One sampling site was located in the Wenatchee River, site 51. One species was collected at this site, spring chinook salmon. Cancer risk estimates exceeded 1×10^{-6} at 30- and 70-year exposure durations, except at the lowest consumption rates with a 30-year exposure duration (Figure 6-54).

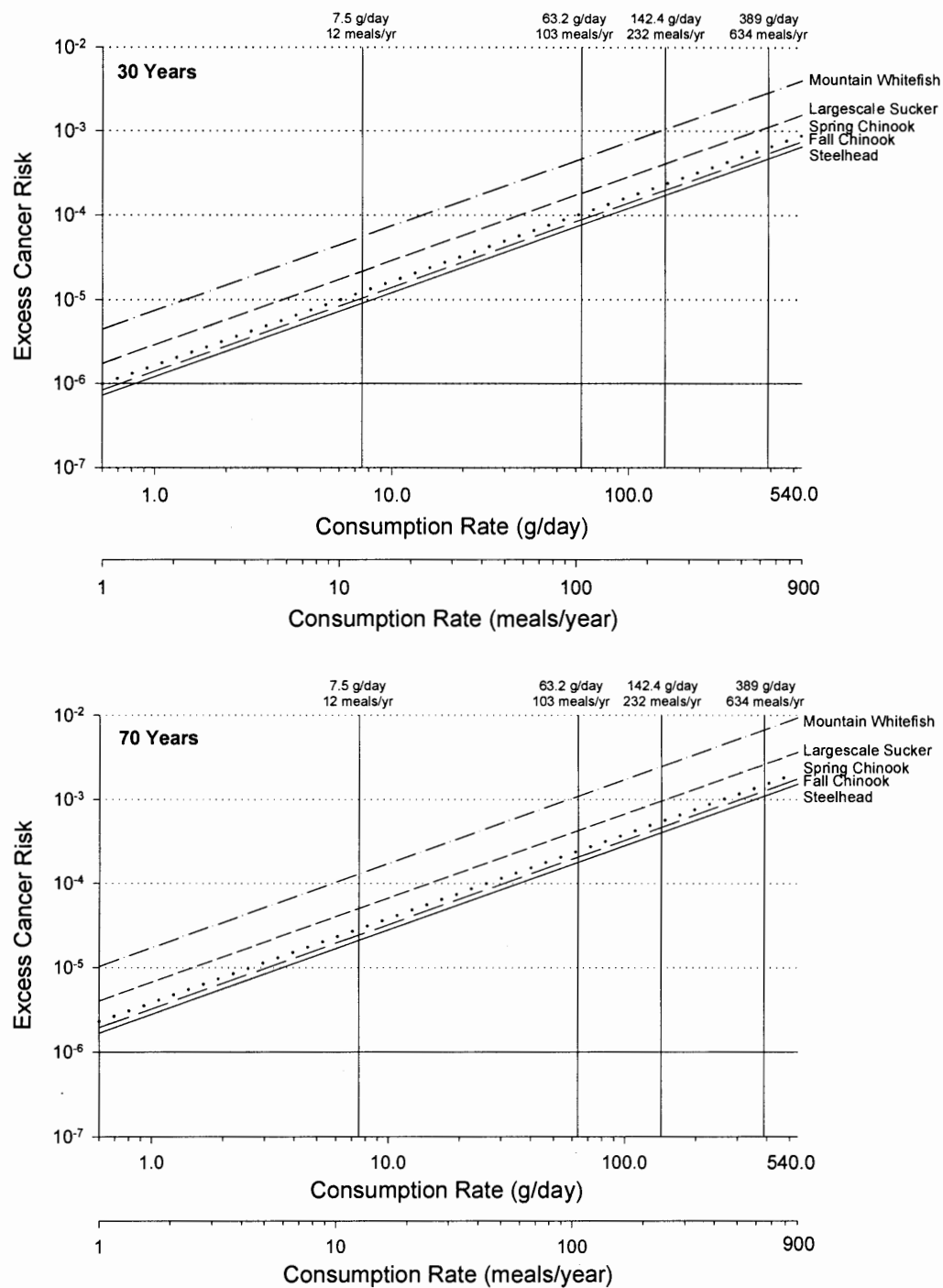


Figure 6-50. Excess cancer risk estimates for fillet samples of fish species collected at Site 48, Yakima River

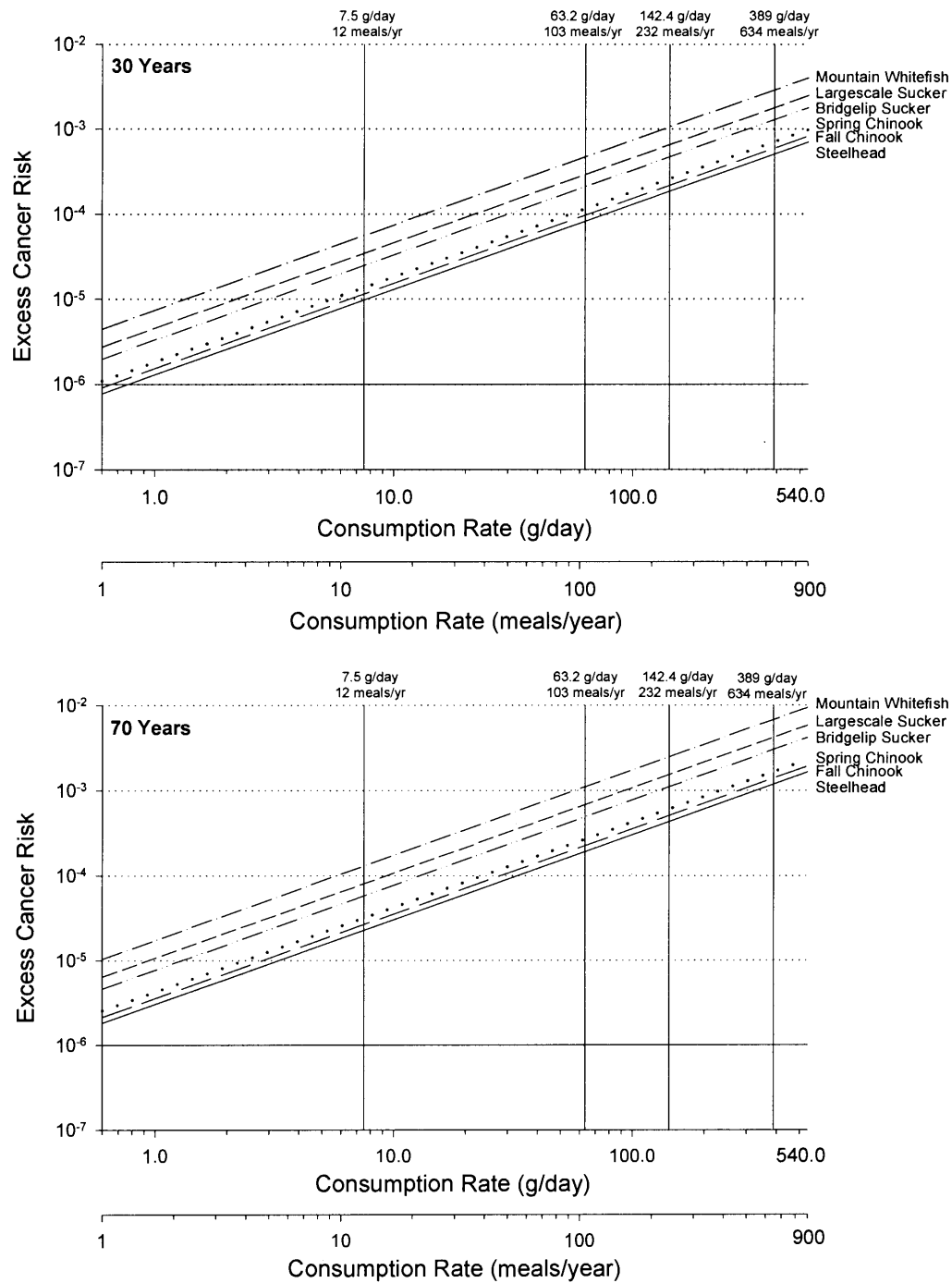


Figure 6-51. Excess cancer risk estimates for whole body samples of fish species collected at Site 48, Yakima River

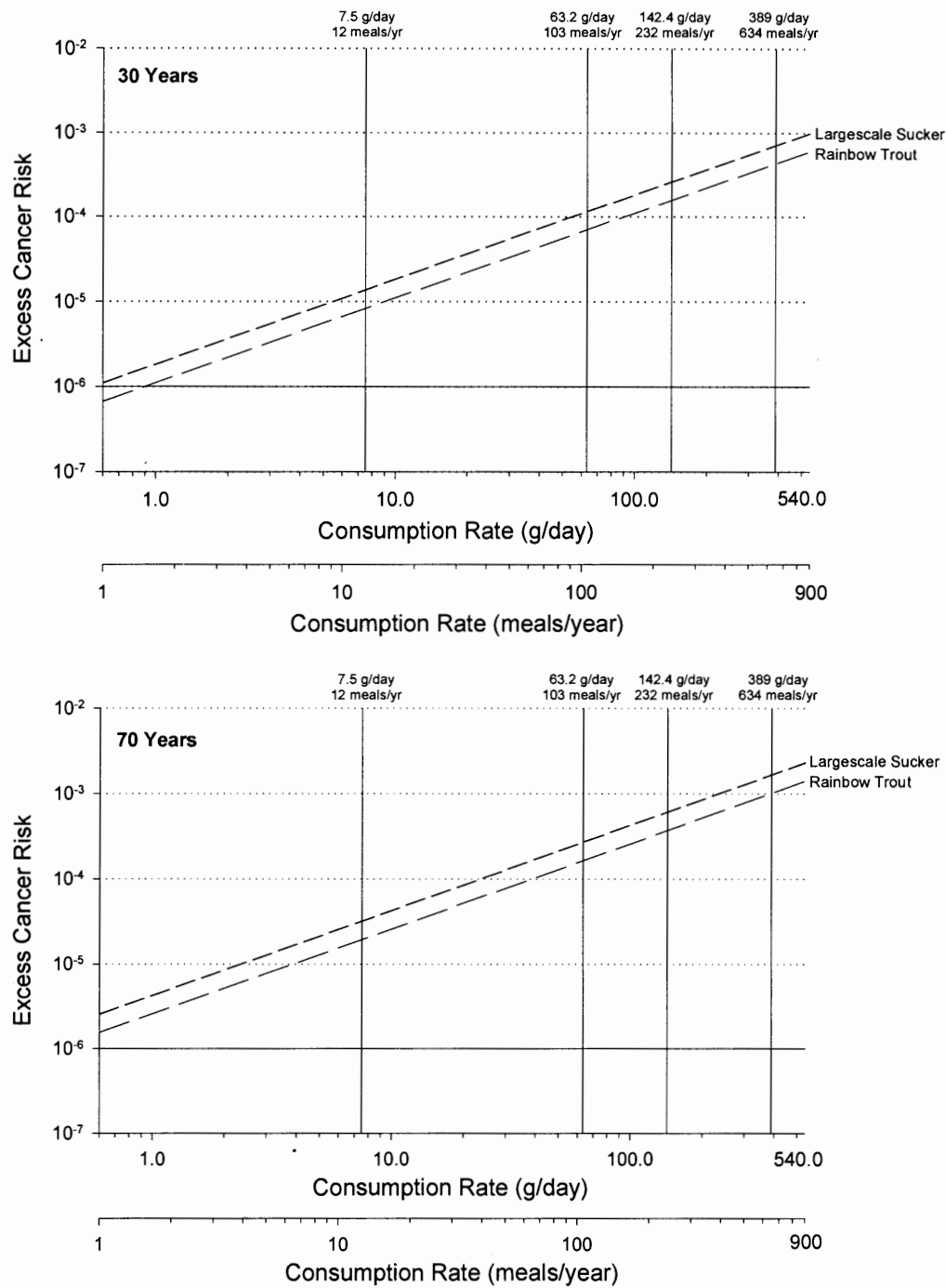


Figure 6-52. Excess cancer risk estimates for fillet samples of fish species collected at Site 49, Yakima River

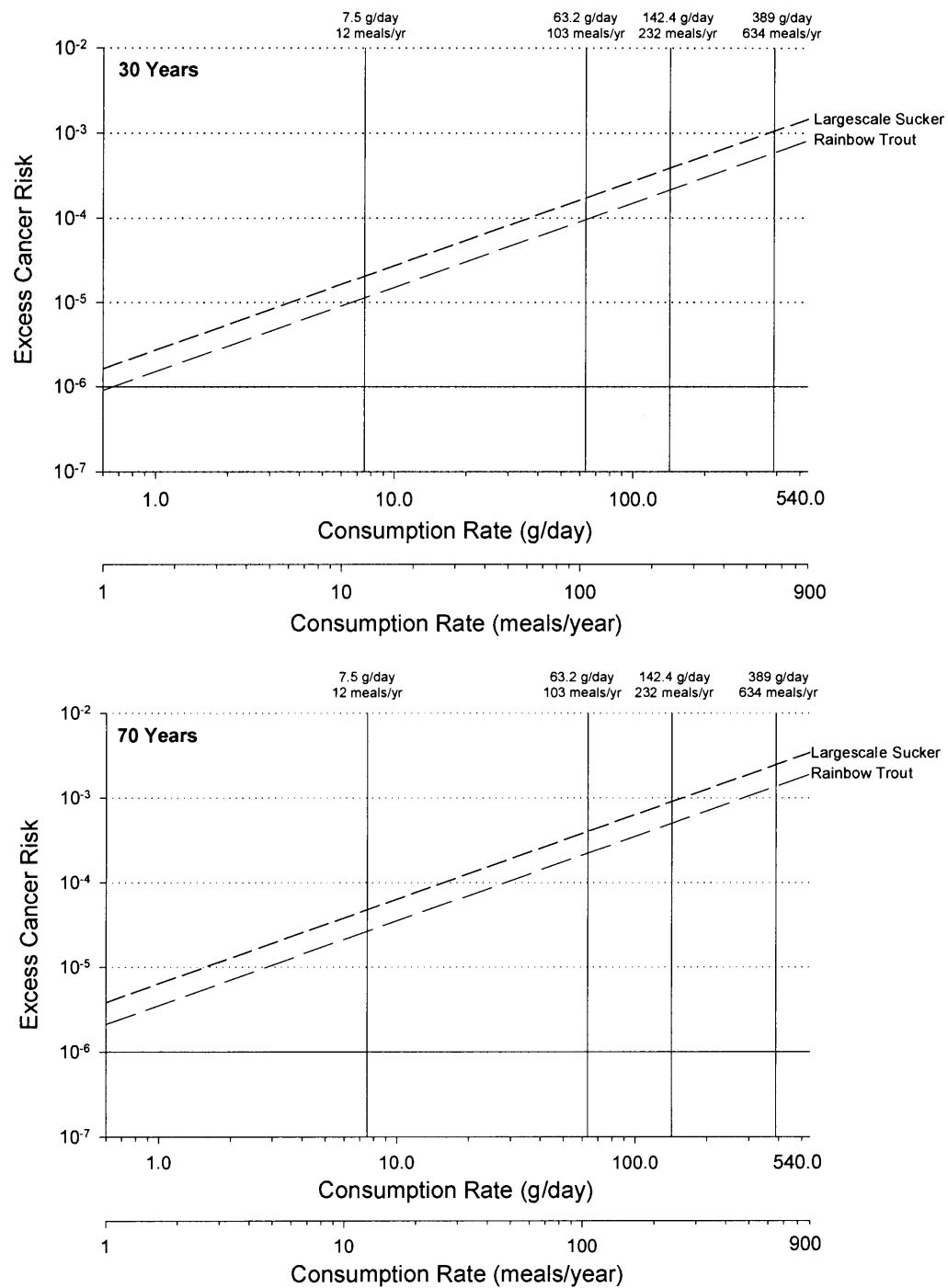


Figure 6-53. Excess cancer risk estimates for whole body samples of fish species collected at Site 49, Yakima River

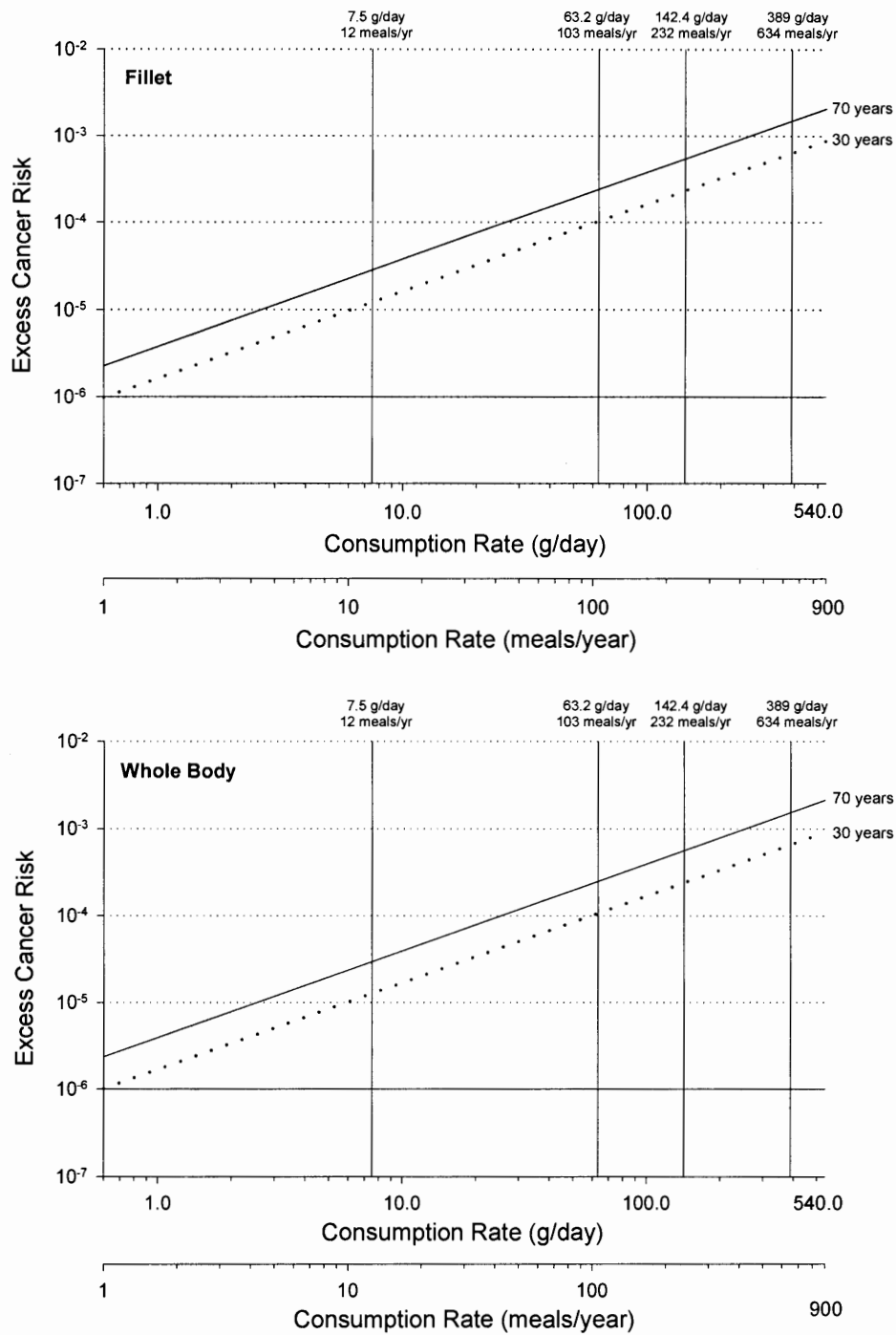


Figure 6-54. Excess cancer risk estimates for samples of spring chinook collected at Site 51, Wenatchee River



Region 10, 1200 Sixth Avenue, Seattle WA 98101

**COLUMBIA RIVER BASIN FISH
CONTAMINANT SURVEY**

**VOLUME 1
Appendix O**

**Summary of Risk Characterization Results
for Resident Species**

July 2002

**Prepared by
U.S. Environmental Protection Agency
Region 10
Seattle, Washington**

Appendix O - Summary of Risk Characterization Results for Resident Species

Six species of resident fish were sampled in the Columbia River basin: bridgelip sucker (*Catostomus columbianus*), largescale sucker (*Catostomus macrocheilus*), mountain whitefish (*Prosopium williamsoni*), white sturgeon (*Acipenser transmontanus*), walleye (*Stizostedion vitreum*), and rainbow trout (*Oncorhynchus mykiss*). These fish spend their entire life in freshwater in contrast to anadromous fish species which spend a portion of their lifecycle in the ocean. Specific life history traits for each species are discussed in Appendix B.

The following sections discuss the non-cancer health effects and cancer risk estimates associated with consuming resident fish species for both the general public and for Columbia River Basin Native American¹ populations. The methods used for this risk characterization were discussed in Sections 4 through 6 and a summary of the results are presented in Section 6.

Seventeen health endpoints were assessed for non-cancer health effects (Table 5-3). A total of 45 chemicals were used to generate the health endpoints ranging from one to 17 chemicals per health endpoint. A total hazard index for non-cancer health effects was also evaluated by summing the hazard quotients for individual chemicals. The 56 chemicals that have toxicity values for assessing cancer were evaluated by summing the cancer risk estimates for individual chemicals to determine a total excess cancer risk for two exposure durations: 30 years and 70 years.

Exposure parameters were selected to estimate cancer risk and non-cancer hazards to two target populations referred to as the general public and Columbia River Basin Native Americans (Native Americans) (see Section 4.1). Within each target population, cancer risks and non-cancer hazards were determined for adults, defined as individuals of age 18 or greater; non-cancer hazards were estimated for children, defined as up to age 15 years for the general public and up to age 6 years for Native Americans. Exposure parameters for adults and children differed for the rate of fish consumption, body weight, and exposure duration (Tables 4-1 and 4-2). A summary and discussion of the non-cancer hazards and excess cancer risks for these target populations are presented in this section by species. More detailed information on the risk characterization results are presented in the Appendices for each fish species and tissue type analyzed in this study and for several spatial scales: site, tributary (largescale sucker only), and basin:

1. All references to "Native Americans" and "tribes" in this report are only applicable to the CRITFC's member tribes: Confederated Tribes of Warm Springs, Yakama Nation, Umatilla Confederated Tribes, Nez Perce Tribe. They are collectively referred to as the CRITFC's member tribes.

- Appendix G1: Hazard quotients for individual chemicals for adults
- Appendix G2: Hazard quotients for individual chemicals for children
- Appendix H1: Percent contribution from individual chemicals to the total hazard index
- Appendix H2: Percent contribution from individual chemicals to endpoint-specific hazard indices
- Appendix I1: Estimated cancer risks for individual chemicals for adults, assuming 30 years exposure
- Appendix I2: Estimated cancer risks for individual chemicals for adults, assuming 70 years exposure
- Appendix J: Percent contribution of individual chemicals to total estimated cancer risk
- Appendix M: Comparison of the total and endpoint specific hazard indices across sites for a CRITFC's member tribal child (high fish consumption rate).
- Appendix N: Cancer risks across a range of consumption rates, by site and species

Appendix O-1 Bridgelip Sucker

Bridgelip sucker were collected from one site in the Columbia River Basin: 48, Yakima River. Chemical analyses were performed on one tissue type, whole body. The risk estimates characterized in this section were based on average chemical concentrations determined from the 3 replicate composite samples collected from Site 48. Because one site was sampled for bridgelip sucker, tributary and basin risk estimates were not calculated.

Noncarcinogenic Health Effects

The potential noncarcinogenic health effects associated with the consumption of whole body bridgelip sucker were assessed by calculating hazard quotients for all detected chemicals with oral reference doses (Appendix G). The hazard quotients of chemicals with the same health endpoint were summed to calculate endpoint-specific hazard indices. In addition, the hazard quotients of all detected chemicals were summed to calculate a total hazard index for the site. Table 1.1 shows the total hazard index for each of the populations evaluated in this risk assessment and the health endpoints which had hazard indices at or above 1.

Table 1.1 Total hazard indices and noncarcinogenic health endpoints with hazard indices at or above 1.0 for bridgelip sucker collected from Site 48, Yakima River

CONSUMPTION RATE/ TISSUE TYPE		HEALTH ENDPOINT	HAZARD INDEX
General Public - Adult^{a,b}			
AFC	WB	Total HI	0.5
HFC	WB	Liver	2.3
		Immune system	6.1
		Total HI	10
General Public - Child^{a,b}			
AFC	WB	Total HI	0.5
HFC	WB	Liver	2.9
		Central nervous system	1.1
		Immune system	7.8
		Total HI	13
Native American - Adult^{c,d}			
AFC	WB	Liver	1.0
		Immune system	2.7
		Total HI	4.5
HFC	WB	Liver	6.2
		Central nervous system	2.4
		Immune system	17
		Reproduction/development	1.8

		Total HI	27
Native American - Child^{c,d}			
AFC	WB	Liver	1.8
		Immune system	4.9
		Total HI	8.2
HFC	WB	Liver	12
		Cardiovascular	1.0
		Central nervous system	4.8
		Immune system	32
		Reproduction/development	3.4
		Hyperpigmentation/keratosis	1.0
		Total HI	53

NOTE: AFC - average fish consumption
HFC - high fish consumption

HI - hazard index
WB - whole body

^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public (adult) of 7.5 g/day, or 1 8-oz meal per month, and for general public (child) of 2.83 g/day, or 0.4 8-oz meal per month (USEPA 2000b).

^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month, and for general public (child) of 77.95 g/day, or 11 8-oz meals per month (USEPA 2000b).

^c AFC risk based on average consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month, and for child fish consumers of 24.8 g/day, or 3 8-oz meals per month (CRITFC 1994).

^d HFC risk based on 99th percentile consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month, and for child fish consumers of 162 g/day, or 22 8-oz meals per month (CRITFC 1994).

Up to six health endpoints exceeded a value of 1.0 in bridgelip sucker, depending on the target population and fish consumption rate used for calculation. The six endpoints were immune system, liver, central nervous system, reproduction/development, cardiovascular, and hyperpigmentation/keratosis, in decreasing order of toxicity.

Noncarcinogenic Chemicals With Hazard Quotients at or Above 1.0

Individual chemicals with a hazard quotient at or above 1.0 in whole body samples of bridgelip sucker at Site 48 were identified and presented in Table 1.2. Hazard quotients for all detected chemicals are presented in Appendix G. A total of five individual chemicals were identified with hazard quotients at or above 1.0 in whole body samples of bridgelip sucker, total Aroclors, total DDT, mercury, manganese, and arsenic, in decreasing order of toxicity based on the Native American child, high fish consumption rate. Aroclor 1254 and Aroclor 1260 were the only Aroclors detected and used in the total Aroclor calculation.

Table 1.2 Chemicals having hazard quotients at or above 1.0 in bridgelip sucker

ADULTS				CHILDREN			
TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)	TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)
	AFC	HFC			AFC	HFC	
General Public							
Whole body							
Total Aroclors	—	6.1	48 (1)	Total Aroclors	—	7.8	48 (1)
Total DDT	—	2.1	48 (1)	Total DDT	—	2.7	48 (1)
Native American							
Whole body							
Total Aroclors	2.7	17	48 (1)	Total Aroclors	4.9	32	48 (1)
Total DDT	—	5.9	48 (1)	Total DDT	1.8	11	48 (1)
Mercury	—	1.8	48 (1)	Arsenic	—	1	48 (1)
				Manganese	—	1.4	48 (1)
				Mercury	—	3.4	48 (1)

NOTE: AFC - average fish consumption
HFC - high fish consumption
^a Site - Waterbody: 48 - Yakima River.

— - hazard quotient less than 1.0

Cancer Risk Estimates

Cancer risks were estimated for general public and Columbia River Basin Native American adults at both 30- and 70-year exposure durations. Appendix I shows the cancer risk estimates for each carcinogenic chemical detected at each site. Total cancer risk estimates for bridgelip sucker are presented in Table 1.3.

Table 1.3 Total excess cancer risk for bridgelip sucker collected from Site 48, Yakima River

CONSUMPTION RATE/ EXPOSURE DURATION	TISSUE TYPE	TOTAL EXCESS CANCER RISK
General Public^{a,b}		
AFC/30-yr	WB	2x10 ⁻⁵
HFC/30-yr	WB	5x10 ⁻⁴
AFC/70-yr	WB	6x10 ⁻⁵
HFC/70-yr	WB	1x10 ⁻³

Native American^{c,d}

AFC/30-yr	WB	2×10^{-4}
HFC/30-yr	WB	1×10^{-3}
AFC/70-yr	WB	5×10^{-4}
HFC/70-yr	WB	3×10^{-3}

NOTE: AFC - average fish consumption

WB - whole body

HFC - high fish consumption

- ^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 7.5 g/day, or 1 8-oz meal per month (USEPA 2000b).
- ^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month (USEPA 2000b).
- ^c AFC risk based on average consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month (CRITFC 1994).
- ^d HFC risk based on 99th percentile consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month (CRITFC 1994).

Carcinogenic Chemicals with Estimated Excess Cancer Risks At or Above 10^{-5}

Cancer risk estimates vary across populations, consumption rates, and exposure levels by constant factors. Chemicals in bridgelip sucker with cancer risks at or above 1×10^{-5} are shown for the Columbia River Basin Native American population with average fish consumption rates at a 70-year exposure duration; total cancer risk for all chemicals are also shown (Tables 1.4.1 and 1.4.2). Multiplicative factors used to estimate risk at different exposure parameters and target populations are footnoted in the table. In addition, Appendix I shows individual risk estimates for each detected chemical for all the exposure scenarios used in this risk assessment.

The chemicals with cancer risk estimates at or above 1×10^{-5} in whole body samples of bridgelip sucker at Site 48 were: adjusted Aroclors; PCBs 118, 126, and 156; 1,2,3,7,8-PeCDD; 2,3,7,8-TCDF; DDD, DDE and DDT; and arsenic.

Table 1.4 Chemicals with cancer risks at or above 1×10^{-5} for Columbia River Basin Native American population at average fish consumption and 70-year exposure in bridgelip sucker, whole body.

Bridgelip Sucker Whole Body		
	Chemical	Site 48
PCBs	Adjusted Aroclors	1E-04
	PCB 118	2E-05
	PCB 126	7E-05
	PCB 156	2E-05
Dioxin/furans	1,2,3,7,8-PeCDD	3E-05
	2,3,7,8-TCDF	1E-05
Pesticides	DDD	2E-05
	DDE	1E-04
	DDT	1E-05
Inorganic	Arsenic	4E-05
Total cancer risk		5E-04

NOTE: To estimate risk levels for general public AFC 30-year exposure, divide the cells in this table by 19.64.
 To estimate risk levels for general public HFC 30-year exposure, divide the cells in this table by 1.03.
 To estimate risk levels for Native American AFC 30-year exposure, divide the cells in this table by 2.34.
 To estimate risk levels for Native American HFC 30-year exposure, divide the cells in this table by 0.38.
 To estimate risk levels for general public AFC 70-year exposure, divide the cells in this table by 8.43.
 To estimate risk levels for general public HFC 70-year exposure, divide the cells in this table by 0.44.
 To estimate risk levels for Native American AFC 70-year exposure, divide the cells in this table by 0.16.

AFC - average fish consumption

HFC - high fish consumption

Appendix O-2 Largescale Sucker

Largescale sucker were collected from seven sites in the Columbia River Basin: 8 and 9U, Columbia River; 13, Snake River; 30, Umatilla River; 48 and 49, Yakima River; and 98, Deschutes River. Chemical analyses were performed on two tissue types—fillet with skin and whole body—except for fish collected from Site 8, where only whole body samples were analyzed. The risk estimates characterized in this section are based on average chemical concentrations determined from three replicate composite samples collected from each site except for Sites 8, 30, and 48. At Site 8, two replicate composites were analyzed; at Site 30, four replicate composites were analyzed for fillet with skin samples; and at Site 48, six replicate composites were analyzed for whole body samples (Appendix A). Data are presented at three spatial scales: site, tributary, and basin. Largescale sucker was the only species collected at replicate sampling sites within a tributary, Site 48 and Site 49 in the Yakima River, and therefore, is the only fish species with tributary risk estimates.

Noncarcinogenic Health Effects

The potential noncarcinogenic health effects associated with the consumption of fillet with skin and whole body largescale sucker were assessed by calculating hazard quotients for all detected chemicals with oral reference doses (Appendix G). The hazard quotients of chemicals with the same health endpoint were summed to calculate endpoint-specific hazard indices. In addition, the hazard quotients of all detected chemicals were summed to calculate a total hazard index for the site, Yakima River tributary, or basin. Samples were collected from two sites in the Yakima River, and, therefore, tributary risk was calculated for the Yakima River only. Table 2.1 shows the total hazard index for each of the target populations evaluated in this risk assessment and the health endpoints which exceeded a value of 1.0.

Table 2.1. Total hazard indices and noncarcinogenic health endpoints with hazard indices at or above 1.0 for largescale sucker

CONSUMPTION RATE/ TISSUE TYPE			HAZARD INDEX							
			SITE ^a						TRIBUTARY AVERAGE ^f	BASIN AVERAGE
			8	9U	98	30	13	48	49	
General Public - Adult^{a,b}										
AFC	FS	Total HI	na	0.7	0.2	0.5	0.4	0.9	0.6	0.6
AFC	WB	Total HI	0.6	1.1	0.4	0.2	0.4	1.1	0.4	0.7
HFC	FS	Liver	na	1.6	—	—	—	2.7	1.5	1.1
		Central nervous system	na	3.8	1.9	5.4	7.4	5.9	4.4	4.8
		Immune system	na	7.0	1.1	2.5	—	7.6	4.9	4.3
		Reproduction/development	na	3.8	1.9	5.4	7.3	5.9	4.4	4.8
		Total HI	na	13	3.5	8.6	8.2	17	11	11
HFC	WB	Liver	1.3	2.8	—	—	—	4.6	1.1	2.0
		Central nervous system	2.7	2.6	2.5	1.4	4.0	3.4	2.2	2.8

CONSUMPTION			HAZARD INDEX								
RATE/ TISSUE TYPE		HEALTH ENDPOINT	SITE ^e						TRIBUTARY	BASIN	
			8	9U	98	30	13	48	49	AVERAGE ^f	AVERAGE
		Immune system	5.1	13	3.8	1.5	1.2	11	4.3	6.3	6.9
		Reproduction/development	2.6	2.3	2.4	1.2	3.8	3.1	2.0	2.8	2.6
		Total HI	11	20	7.3	3.9	7.1	20	8.3	16	13
General Public - Child ^{a,b}											
AFC	FS	Total HI	na	0.6	0.2	0.4	0.4	0.8	0.5	0.6	0.5
AFC	WB	Total HI	0.5	0.9	0.3	0.2	0.3	0.9	0.4	0.8	0.6
HFC	FS	Liver	na	2.1	—	—	—	3.5	1.9	2.7	1.4
		Central nervous system	na	4.9	2.4	6.9	9.4	7.6	5.7	6.6	6.2
		Immune system	na	9.0	1.5	3.2	—	9.7	6.3	8.0	5.5
		Reproduction/development	na	4.8	2.4	6.8	9.4	7.5	5.6	6.6	6.1
		Total HI	na	17	4.4	11	10	21	14	18	14
HFC	WB	Liver	1.7	3.5	—	—	—	5.8	1.4	4.4	2.6
		Central nervous system	3.5	3.3	3.2	1.7	5.2	4.3	2.7	3.8	3.6
		Immune system	6.5	16	4.9	1.9	1.5	15	5.5	8.0	8.8
		Metabolism	—	1.0	—	—	—	—	—	—	0.3
		Reproduction/development	3.3	3.0	3.1	1.6	4.9	4.0	2.5	3.5	3.3
		Total HI	14	26	9.3	5.0	9.0	26	11	21	16
Native American - Adult ^{c,d}											
AFC	FS	Liver	na	—	—	—	—	1.2	—	—	0.5
		Central nervous system	na	1.7	—	2.4	3.3	2.6	2.0	2.3	2.1
		Immune system	na	3.1	—	1.1	—	3.4	2.2	2.8	1.9
		Reproduction/development	na	1.7	—	2.4	3.3	2.6	2.0	2.3	2.1
		Total HI	na	5.8	1.5	3.8	3.6	7.3	4.9	6.1	4.7
AFC	WB	Liver	—	1.2	—	—	—	2.0	—	1.5	0.9
		Central nervous system	1.2	1.2	1.1	—	1.8	1.5	—	1.3	1.2
		Immune system	2.3	5.6	1.7	—	—	5.1	1.9	4.0	3.1
		Reproduction/development	1.2	1.0	1.1	—	1.7	1.4	—	1.2	1.1
		Total HI	4.8	9.1	3.2	1.7	3.1	9.0	3.7	7.2	5.7
HFC	FS	Liver	na	4.5	—	1.1	1.2	7.4	4.1	5.8	3.1
		Central nervous system	na	10	5.2	15	20	16	12	14	13
		Immune system	na	19	3.1	6.9	—	21	13	17	12
		Reproduction/development	na	10	5.1	15	20	16	12	14	13
		Total HI	na	36	9.5	24	22	45	30	38	29
HFC	WB	Liver	3.5	7.5	—	1.0	1.5	12	3.1	9.4	5.5
		Kidney	—	1.2	—	—	—	—	—	—	0.3
		Central nervous system	7.5	7.1	6.9	3.7	11	9.3	5.9	8.1	7.6
		Immune system	14	35	10	4.0	3.1	31	12	25	19
		Metabolism	—	2.2	—	—	—	—	—	—	0.7
		Reproduction/development	7.1	6.4	6.7	3.4	10	8.6	5.4	7.5	7.1
		Gastrointestinal	1.0	—	—	—	—	—	—	—	0.6
		Total HI	29	56	20	11	19	55	23	45	35
Native American - Child ^{c,d}											
AFC	FS	Liver	na	1.3	—	—	—	2.2	1.2	1.7	0.9
		Central nervous system	na	3.1	1.5	4.4	6.0	4.8	3.6	4.2	3.9
		Immune system	na	5.7	—	2.1	—	6.2	4.0	5.1	3.5
		Reproduction/development	na	3.1	1.5	4.4	6.0	4.8	3.6	4.2	3.9
		Total HI	na	11	2.8	7.0	6.6	13	9.0	11	8.6
AFC	WB	Liver	1.1	2.2	—	—	—	3.7	—	2.8	1.6
		Central nervous system	2.2	2.1	2.1	1.1	3.3	2.8	1.7	2.4	2.3
		Immune system	4.1	10	3.1	1.2	—	9.3	3.5	7.4	5.6
		Reproduction/development	2.1	1.9	2.0	—	3.1	2.6	1.6	2.2	2.1

CONSUMPTION		HAZARD INDEX								
RATE/ TISSUE TYPE	HEALTH ENDPOINT	SITE ^e							TRIBUTARY AVERAGE ^f	BASIN AVERAGE
		8	9U	98	30	13	48	49		
	Total HI	8.7	17	5.9	3.2	5.7	16	6.8	13	10
HFC FS	Liver	na	8.7	—	2.1	2.3	14	7.9	11	6.0
	Central nervous system	na	20	10	29	39	31	24	28	26
	Immune system	na	37	6.0	13	—	40	26	33	23
	Metabolism	na	1.1	—	—	—	—	—	—	0.8
	Reproduction/development	na	20	9.9	28	39	31	23	27	25
	Gastrointestinal	na	1.3	—	—	—	—	—	—	0.4
	Total HI	na	69	18	46	43	88	59	74	56
HFC WB	Liver	6.9	15	1.7	2.0	3.0	24	6.0	18	11
	Kidney	1.1	2.3	—	—	—	—	—	—	0.6
	Cardiovascular	1.1	—	—	—	—	—	—	—	0.6
	Central nervous system	15	14	14	7.2	21	18	11	16	15
	Immune system	27	68	20	7.7	6.1	61	23	48	37
	Metabolism	—	4.3	—	—	1.1	1.0	1.1	1.0	1.4
	Reproduction/development	14	12	13	6.5	20	17	10	15	14
	Hyperpigmentation/keratosis	1.1	—	—	—	—	—	—	—	0.6
	Minimal neurotoxicity	1.8	—	—	—	1.3	—	—	—	0.7
	Gastrointestinal	2.0	1.8	—	—	1.6	—	—	—	1.1
	Total HI	57	110	39	21	37	110	44	86	68

- NOTE: AFC - average fish consumption na - not applicable; sample type not analyzed at this site FS - fillet with skin
HFC - high fish consumption -- health endpoint <1.0 at that site WB - whole body
HI - hazard index
- ^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public (adult) of 7.5 g/day, or 1 8-oz meal per month, and for general public (child) of 2.83 g/day, or 0.4 8-oz meal per month (USEPA 2000b).
- ^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month, and for general public (child) of 77.95 g/day, or 11 8-oz meals per month (USEPA 2000b).
- ^c AFC risk based on average consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month, and for child fish consumers of 24.8 g/day, or 3 8-oz meals per month (CRITFC 1994).
- ^d HFC risk based on 99th percentile consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month, and for child fish consumers of 162 g/day, or 22 8-oz meals per month (CRITFC 1994).
- ^e Site - Waterbody: 8 - located in the Columbia River between the John Day Dam and the McNary Dam; 9U - located in the upper Columbia River above the Snake River; 98 - Deschutes River; 30 - Umatilla River; 13 - Snake River; 48 - Yakima River; 49 - Yakima River.
- ^f Tributary risk calculated for Site 48 and Site 49 in the Yakima River.

Up to ten health endpoints exceeded a value of 1.0, depending on the target population and exposure parameters used for calculation. The ten endpoints were immune system, central nervous system, reproduction/development, liver, metabolism, gastrointestinal, minimal neurotoxicity, kidney, cardiovascular, and hyperpigmentation/keratosis, in general decreasing order of toxicity based on basin averages in whole body samples, the tissue type where all ten health endpoints exceeded 1.0. Among specific sampling sites, total hazard indices were lowest at Site 98 in the Deschutes River for Fillet with skin samples and at Site 30 in the Umatilla River for whole body samples. Total hazard indices were highest at Site 48 in the Yakima River for fillet with skin samples and at two sites, 9U in the Columbia River and 48 in the Yakima River for whole body samples. Total hazard indices among sites varied by a factor of 4.8 for fillet with skin samples and 5.2 for whole body samples.

Chemicals With Hazard Quotients At or Above 1.0

Individual chemicals with a hazard quotient at or above 1.0 in fillet with skin samples of largescale sucker collected from six sites and in whole body samples of largescale sucker collected from seven sites were identified and presented in Table 2.2. Hazard quotients for other individual chemicals are presented in Appendix G. A total of four individual chemicals were identified with hazard quotients at or above 1.0 in fillet with skin samples of largescale sucker: total Aroclors, mercury, total DDT, and chromium, in decreasing order of toxicity based on the Native American child high fish consumption rate. A total of ten individual chemicals were identified in whole body samples of largescale sucker: total Aroclors, mercury, total DDT, nickel, cadmium, chromium, aluminum, manganese, zinc, and arsenic, in decreasing order of toxicity based on the Native American child high fish consumption rate. Aroclor 1254 and/or Aroclor 1260 were the only Aroclors detected and used in the total Aroclor calculation.

Table 2.2. Chemicals having hazard quotients at or above 1.0 in largescale sucker

ADULTS				CHILDREN			
TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)	TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		Sites ^a WITH VALUES >1 (total # of sites)
	AFC	HFC			AFC	HFC	
General Public							
Fillet with skin							
Total	—	1.1-7.0	9U,98,30,48,49	Total	—	1.5-9.0	9U,98,30,48,49
Aroclors			(6)	Aroclors			(6)
Total DDT	—	1.4-2.6	9U,48,49 (6)	Total DDT	—	1.8-3.3	9U,48,49 (6)
Mercury	—	1.9-7.3	9U,98,30,13,48, 49 (6)	Mercury	—	2.4-9.4	9U,98,30,13,48, 49 (6)
Whole body							
Total	—	1.2-13	8,9U,98,30,13,4	Total	—	1.5-16	8,9U,98,30,13,
Aroclors			8, 49 (7)	Aroclors			48,49 (7)
Total DDT	—	1.0-4.4	8,9U,48,49 (7)	Total DDT	—	1.3-5.6	8,9U,48,49 (7)

ADULTS				CHILDREN			
TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)	TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		Sites ^a WITH VALUES >1 (total # of sites)
	AFC	HFC			AFC	HFC	
Mercury	–	1.2-3.8	8,9U,98,30,13,4 8, 49 (7)	Mercury	–	1.6-4.9	8,9U,98,30,13, 48, 49 (7)
Native American							
Fillet with skin							
Total	1.1-3.4	3.1-21	9U,98a,30,48,49 (6)	Total	2.1-6.2	6.0-40	9U,98 ^b ,30,48,49 (6)
Aroclors				Aroclors			
Total DDT	1.1	3.9-7.0	9U ^b ,48,49 ^b (6)	Total DDT	1.2-2.1	7.6-14	9U,30 ^b ,13 ^b ,48,4 9 (6)
Mercury	1.7-3.3	5.1-20	9U,98a,30,13,48 , 49 (6)	Chromium	–	1.3	9U (6)
				Mercury	1.5-6.0	9.9-39	9U,98,30,13,48, 49 (6)
Whole body							
Total	1.7-	3.1-35	8,9U,98,30 ^b ,1	Total	1.2-10	6.1-68	8,9U,98,30,13
Aroclors	5.6		3 ^b , 48, 49 (7)	Aroclors			^b , 48,49 (7)
Total DDT	1.2-	1.0-12	8a,9U,13 ^b ,48, 49 ^b (7)	Total DDT	1.0-3.5	1.1-23	8,9U,98 ^b ,30 ^b , 13 ^b ,48,49 (7)
Cadmium	–	1.2	9U (7)	Aluminum	–	1.1-1.8	8,9U,13 (7)
Chromium	–	1.0	8 (7)	Arsenic	–	1.1	8 (7)
Mercury	1.0-	3.4-10	8,9U,98,30 ^b ,1 3,48,49 ^b (7)	Cadmium	–	1.1-2.3	8,9U (7)
Nickel	–	1.6	9U (7)	Chromium	–	1.6-2.0	8,9U,13 (7)
				Manganese	–	1.3-1.5	9U,13,48 (7)
				e			
				Mercury	1.0-3.1	6.5-20	8,9U,98,30,13 , 48, 49 (7)
				Nickel	–	3.0	9U (7)
				Zinc	–	1.3	9U (7)

NOT AFC - average fish consumption
E: HFC - high fish consumption

– - value less than 1.0
Bold indicates site with highest HQ

^a Site - Waterbody: 8 - located in the Columbia River between the John Day Dam and the McNary Dam; 9U - located in the upper Columbia River above the Snake River; 98 - Deschutes River; 30 - Umatilla River; 13 - Snake River; 48 - Yakima River; 49 - Yakima River.

^b HFC only

Cancer Risk Estimates

Cancer risks were estimated for general public and Columbia River Basin Native American adults at both 30- and 70-year exposure durations. Cancer risk estimates for detected carcinogenic chemicals at each sampling site are presented in Appendix I. Total excess cancer risk estimates are presented in Table 2.3 for each sampling site and for the tributary and basin averages.

Table 2.3. Total excess cancer risk for largescale sucker

		TOTAL EXCESS CANCER RISK								
CONSUMPTION RATE/ EXPOSURE DURATION	TISSUE TYPE	SITE ^e							TRIBUTARY AVERAGE	BASIN AVERAGE
		8	9U	98	30	13	48	49		
General Public ^{a,b}										
AFC/30-yr	FS	na	3x10 ⁻⁵	7x10 ⁻⁶	8x10 ⁻⁶	1x10 ⁻⁵	2x10 ⁻⁵	1x10 ⁻⁵	2x10 ⁻⁵	2x10 ⁻⁵
	WB	2x10 ⁻⁵	5x10 ⁻⁵	2x10 ⁻⁵	7x10 ⁻⁶	6x10 ⁻⁶	3x10 ⁻⁵	2x10 ⁻⁵	3x10 ⁻⁵	3x10 ⁻⁵
HFC/30-yr	FS	na	6x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻⁴	2x10 ⁻⁴	4x10 ⁻⁴	3x10 ⁻⁴	3x10 ⁻⁴	4x10 ⁻⁴
	WB	4x10 ⁻⁴	1x10 ⁻³	3x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻⁴	7x10 ⁻⁴	4x10 ⁻⁴	6x10 ⁻⁴	5x10 ⁻⁴
AFC/70-yr	FS	na	7x10 ⁻⁵	2x10 ⁻⁵	2x10 ⁻⁵	3x10 ⁻⁵	5x10 ⁻⁵	3x10 ⁻⁵	4x10 ⁻⁵	5x10 ⁻⁵
	WB	5x10 ⁻⁵	1x10 ⁻⁴	4x10 ⁻⁵	2x10 ⁻⁵	1x10 ⁻⁵	8x10 ⁻⁵	5x10 ⁻⁵	7x10 ⁻⁵	6x10 ⁻⁵
HFC/70-yr	FS	na	1x10 ⁻³	3x10 ⁻⁴	3x10 ⁻⁴	5x10 ⁻⁴	1x10 ⁻³	6x10 ⁻⁴	8x10 ⁻⁴	9x10 ⁻⁴
	WB	9x10 ⁻⁴	2x10 ⁻³	7x10 ⁻⁴	3x10 ⁻⁴	3x10 ⁻⁴	2x10 ⁻³	9x10 ⁻⁴	1x10 ⁻³	1x10 ⁻³
Native American ^{c,d}										
AFC/30-yr	FS	na	3x10 ⁻⁴	6x10 ⁻⁵	6x10 ⁻⁵	1x10 ⁻⁴	2x10 ⁻⁴	1x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴
	WB	2x10 ⁻⁴	5x10 ⁻⁴	1x10 ⁻⁴	6x10 ⁻⁵	5x10 ⁻⁵	3x10 ⁻⁴	2x10 ⁻⁴	3x10 ⁻⁴	2x10 ⁻⁴
HFC/30-yr	FS	na	2x10 ⁻³	4x10 ⁻⁴	4x10 ⁻⁴	6x10 ⁻⁴	1x10 ⁻³	7x10 ⁻⁴	9x10 ⁻⁴	1x10 ⁻³
	WB	1x10 ⁻³	3x10 ⁻³	9x10 ⁻⁴	3x10 ⁻⁴	3x10 ⁻⁴	2x10 ⁻³	1x10 ⁻³	2x10 ⁻³	1x10 ⁻³
AFC/70-yr	FS	na	6x10 ⁻⁴	1x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	4x10 ⁻⁴	3x10 ⁻⁴	4x10 ⁻⁴	4x10 ⁻⁴
	WB	4x10 ⁻⁴	1x10 ⁻³	3x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻⁴	7x10 ⁻⁴	4x10 ⁻⁴	6x10 ⁻⁴	5x10 ⁻⁴
HFC/70-yr	FS	na	4x10 ⁻³	8x10 ⁻⁴	9x10 ⁻⁴	1x10 ⁻³	3x10 ⁻³	2x10 ⁻³	2x10 ⁻³	2x10 ⁻³
	WB	3x10 ⁻³	7x10 ⁻³	2x10 ⁻³	8x10 ⁻⁴	7x10 ⁻⁴	4x10 ⁻³	2x10 ⁻³	4x10 ⁻³	3x10 ⁻³

NOTE: AFC - average fish consumption
HFC - high fish consumption
na - not applicable; sample type not analyzed at this site

FS - fillet with skin
WB - whole body

- ^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 7.5 g/day, or 1 8-oz meal per month (USEPA 2000b).
^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month (USEPA 2000b).
^c AFC risk based on average consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month (CRITFC 1994).
^d HFC risk based on 99th percentile consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month (CRITFC 1994).
^e Site - Waterbody: 8 - located in the Columbia River between the John Day Dam and the McNary Dam; 9U - located in the upper Columbia River above the Snake River; 13 - Snake River; 30 - Umatilla River; 48 - Yakima River; 49 - Yakima River; 98 - Deschutes River; 101 - Umatilla River.

Carcinogenic Chemicals with Estimated Excess Cancer Risks At or Above 10⁻⁵

Cancer risk estimates vary across populations, consumption rates, and exposure levels by constant factors. Chemicals in largescale sucker with cancer risks at or above 1 x 10⁻⁵ are shown for the Columbia River Basin Native American population with average fish consumption rates at a 70-year exposure duration; total cancer risk for all chemicals are also shown (Tables 2.4.1 and 2.4.2). Multiplicative factors used to estimate risk at

different exposure parameters and target populations are footnoted in the table. In addition, Appendix I shows individual risk estimates for each detected chemical for all the exposure scenarios used in this risk assessment.

Adjusted Aroclors had the highest or second highest risk estimate at all sites in whole body samples and at all sites except Site 13 in fillet with skin samples where dibenz[a,h]anthracene had the highest risk estimate. Aroclor 1254 was the only individual Aroclor detected and used in the adjusted Aroclor calculation at Site 98 in fillet with skin and whole body samples. At Site 30, Aroclor 1260 was the only individual Aroclor detected and used in the adjusted Aroclor calculation in whole body samples. For all other sites with adjusted Aroclors greater than 10^{-5} , both Aroclors 1254 and 1260 were detected and used in the adjusted Aroclor calculation. At Site 48, DDE had the highest risk estimate for both tissue types. Of the PCB congeners, PCB 126 had the highest risk estimate for both tissue types at Site 98, and for fillet with skin samples at Site 9U. At Site 13, in fillet with skin samples, dibenz[a,h]anthracene, PCB 169, and benzo(a)pyrene, had risks greater than 10^{-5} and were not identified at any other sites.

Table 2.4.1. Chemicals with cancer risks at or above 1×10^{-5} for Columbia River Basin Native American population at average fish consumption and 70-year exposure in largescale sucker, whole body

Chemical		Largescale sucker - whole body						
		Site						
		8	9U	13	30	48	49	98
PCBs	Adjusted Aroclors	8×10^{-5}	2×10^{-4}	2×10^{-5}	2×10^{-5}	2×10^{-4}	7×10^{-5}	6×10^{-5}
	PCB 105	2×10^{-5}	6×10^{-5}			1×10^{-5}	2×10^{-5}	1×10^{-5}
	PCB 114	-						
	PCB 118	3×10^{-5}	1×10^{-4}		1×10^{-5}	3×10^{-5}	3×10^{-5}	3×10^{-5}
	PCB 126	-	2×10^{-4}				6×10^{-5}	1×10^{-4}
	PCB 156	3×10^{-5}	1×10^{-4}	1×10^{-5}	1×10^{-5}	4×10^{-5}	4×10^{-5}	3×10^{-5}
	PCB 157	-	2×10^{-5}					
Dioxin/furans	1,2,3,7,8-PeCDD	1×10^{-3}			2×10^{-5}	2×10^{-5}	2×10^{-5}	2×10^{-5}
	2,3,7,8-TCDD	3×10^{-5}					1×10^{-5}	
	2,3,7,8-TCDF	5×10^{-5}	3×10^{-5}	-	-		-	-
Pesticide	DDD	1×10^{-5}	1×10^{-5}	-	-	2×10^{-5}	-	-
	DDE	8×10^{-5}	2×10^{-4}	2×10^{-5}	1×10^{-5}	3×10^{-5}	6×10^{-5}	1×10^{-5}
	DDT	-	-	-	-	3×10^{-4}	1×10^{-5}	-
Inorganic	Arsenic	4×10^{-5}	3×10^{-5}	3×10^{-5}	2×10^{-5}	1×10^{-5}	1×10^{-5}	2×10^{-5}
Semivolatiles	1,2-Diphenylhydrazine	-	-	-	-	-	4×10^{-5}	-
Total Cancer Risk		4×10^{-4}	1×10^{-3}	1×10^{-4}	1×10^{-4}	7×10^{-4}	4×10^{-4}	3×10^{-4}

Table 2.4.2. Chemicals with cancer risks greater at or above 1×10^{-5} for Columbia River Basin Native American population at average fish consumption and 70-year exposure in largescale sucker fillet with skin

		Largescale Sucker-Fillet w-skin					
		Site					
	Chemical	9U	13	30	48	49	98
PCBs	Adjusted Aroclors	1E-04		4E-05	1E-04	9E-05	2E-05
	PCB 105	3E-05					
	PCB 114	1E-05					
	PCB 118	7E-05		1E-05	2E-05	1E-05	1E-05
	PCB 126	1E-04				2E-05	4E-05
	PCB 156	8E-05		1E-05	3E-05	1E-05	1E-05
	PCB 157	1E-05					
	PCB 169		4E-05				
Dioxin/furans	1,2,3,7,8-PeCDD			2E-05		1E-05	
	2,3,7,8-TCDF	2E-05					
Pesticides	DDE	1E-04	2E-05	2E-05	2E-04	9E-05	
	DDT				2E-05	1E-05	
Inorganic	Arsenic		1E-05	1E-05			1E-05
Semivolatiles	Dibenz[a,h]anthracene		9E-05				
	Benzo(a)pyrene		3E-05				
Total Cancer Risk for All Chemicals		6E-04	2E-04	2E-04	4E-04	3E-04	2E-04

NOTE: A blank indicates that this chemical does not have a cancer risk greater than 1×10^{-5} for this tissue type at this site

To estimate risk levels for general public AFC 30-year exposure, divide the cells in this table by 19.64.

To estimate risk levels for general public HFC 30-year exposure, divide the cells in this table by 1.03.

To estimate risk levels for Native American AFC 30-year exposure, divide the cells in this table by 2.34.

To estimate risk levels for Native American HFC 30-year exposure, divide the cells in this table by 0.38.

To estimate risk levels for general public AFC 70-year exposure, divide the cells in this table by 8.43.

To estimate risk levels for general public HFC 70-year exposure, divide the cells in this table by 0.44.

To estimate risk levels for Native American AFC 70-year exposure, divide the cells in this table by 0.16.

- Site - Waterbody: 8 - located in the Columbia River between the John Day Dam and the McNary Dam; 9U - located in the upper Columbia River above the Snake River; 13 - Snake River; 30 - Umatilla River; 48 - Yakima River; 49 - Yakima River; 98 - Deschutes River

AFC - average fish consumption
HFC - high fish consumption

Appendix O-3 Mountain Whitefish

Mountain whitefish were collected from four sites in the Columbia River Basin: 9U, Columbia River; 48, Yakima River; 98, Deschutes River; and 101, Umatilla River. Chemical analyses were performed on both fillet with skin and whole body tissue types. The cancer risk and non-cancer hazards in this section are based on average chemical concentrations determined from 3 replicate composite samples collected from each site (Appendix A). Data are presented at two spatial scales: site and basin. Mountain whitefish were not collected from replicate sampling sites within a tributary and, therefore, tributary risk estimates were not calculated.

Noncarcinogenic Health Effects

The potential noncarcinogenic health effects associated with the consumption of fillet with skin and whole body mountain whitefish were assessed by calculating hazard quotients for all detected chemicals with oral reference doses (Appendix G). The hazard quotients of chemicals with the same health endpoint were summed to calculate endpoint-specific hazard indices. In addition, the hazard quotients of all detected chemicals were summed to calculate a total hazard index for the site or basin. Table 3.1 shows the total hazard index for each of the target populations evaluated in this risk assessment and the health endpoints which are at or above a hazard index of 1.0.

Table 3.1 Total hazard indices and noncarcinogenic health endpoints with hazard indices at or above 1.0 for mountain whitefish

CONSUMPTION RATE/ TISSUE TYPE			HAZARD INDEX				BASIN AVERAGE
			SITE ^c				
HEALTH ENDPOINT			9U	98	101	48	
General Public - Adult ^{a,b}							
AFC	FS	Immune system	2.7	—	—	1.0	1.0
		Total HI	2.9	0.3	0.2	1.4	1.2
AFC	WB	Immune system	1.2	—	—	—	0.6
		Total HI	1.4	0.4	0.3	1.1	0.8
HFC	FS	Liver	3.7	—	—	3.9	2.1
		Central nervous system	—	1.6	1.2	2.6	1.6
		Immune system	50	2.7	1.4	20	20
		Reproduction/development	—	1.6	1.2	2.6	1.6
		Total HI	55	4.7	3.2	26	24
HFC	WB	Liver	3.8	—	—	3.6	2.1

CONSUMPTION RATE/ TISSUE TYPE			HAZARD INDEX				BASIN AVERAGE
			SITE ^c				
			9U	98	101	48	

CONSUMPTION RATE/ TISSUE TYPE			HAZARD INDEX				BASIN AVERAGE
			SITE ^c				
			9U	98	101	48	
HEALTH ENDPOINT							
		Total HI	44	3.9	2.6	21	19
AFC	WB	Liver	3.1	—	—	2.9	1.7
		Central nervous system	—	1.3	—	1.6	1.2
		Immune system	19	3.5	2.3	12	9.3
		Reproduction/development	—	1.2	—	1.5	1.1
		Total HI	22	5.6	4.2	17	13
HFC	FS	Liver	20	—	1.7	21	11
		Central nervous system	—	8.7	6.6	14	8.7
		Immune system	270	14	7.2	100	100
		Reproduction/development	—	8.7	6.5	14	8.6
		Selenosis	1.0	—	1.1	1.5	1.1
		Gastrointestinal	1.2	—	—	—	0.5
		Total HI	290	25	17	140	130
HFC	WB	Liver	20	1.7	3.8	19	11
		Central nervous system	—	8.3	5.9	10	7.8
		Immune system	120	23	15	79	61
		Metabolism	—	1.6	1.0	—	1.2
		Reproduction/development	—	8.0	5.6	9.9	7.4
		Selenosis	2.3	1.4	2.5	2.2	2.1
		Total HI	150	37	27	110	83

NOTE: AFC - average fish
consumption
HFC - high fish consumption
HI - hazard index

— - health endpoint <1.0 at that
site

FS - fillet with skin
WB - whole body

- ^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public (adult) of 7.5 g/day, or 1 8-oz meal per month, and for general public (child) of 2.83 g/day, or 0.4 8-oz meal per month (USEPA 2000b).
- ^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month, and for general public (child) of 77.95 g/day, or 11 8-oz meals per month (USEPA 2000b).
- ^c AFC risk based on average consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month, and for child fish consumers of 24.8 g/day, or 3 8-oz meals per month (CRITFC 1994).
- ^d HFC risk based on 99th percentile consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month, and for child fish consumers of 162 g/day, or 22 8-oz meals per month (CRITFC 1994).
- ^e Site - Waterbody: 9U - located in the upper Columbia River above the Snake River; 98 - Deschutes River; 101 - Umatilla River; 48 - Yakima River.

Up to seven health endpoints were at or above a value of 1.0, depending on the target population and exposure parameters used for calculation. The seven endpoints were immune system, liver, central nervous system, reproduction/development, selenosis, metabolism, and gastrointestinal in decreasing order of toxicity based on basin average total hazard indices of whole body samples. The immune system endpoint exceeded 1.0 for each target population and exposure scenario. The gastrointestinal health endpoint was unique to fillet with skin samples. Among specific sampling sites, total hazard indices for both fillet with skin and whole body samples were lowest at Site 101 in the Umatilla River and Site 98 in the Deschutes River and were generally an order of magnitude higher at Site 48 in the Yakima River and Site 9U in the Columbia River. Total hazard indices among sample sites varied by a factor of 17 in fillet with skin samples and by 5 in whole body samples.

Chemicals With Hazard Quotients At or Above 1.0

Individual chemicals with a hazard quotient at or above 1.0 in fillet with skin and whole body samples of mountain whitefish collected from four sites were identified and are presented in Table 3.2. Hazard quotients for other individual chemicals are presented in Appendix G. A total of four individual chemicals were identified with hazard quotients at or above 1.0 in fillet with skin samples of mountain whitefish: total Aroclors, total DDT, mercury, and selenium, in decreasing order of toxicity based on the Native American child, high fish ingestion rate. A total of five individual chemicals were identified with hazard quotients at or above 1.0 in whole body samples of mountain whitefish: total Aroclors, total DDT, mercury, selenium, and zinc, in decreasing order of toxicity based on the Native American child, high fish ingestion rate. Total Aroclors were comprised of Aroclor 1242, Aroclor 1254 and/or Aroclor 1260, depending on the sampling site.

Table 3.2 Chemicals having hazard quotients at or above 1.0 in mountain whitefish

ADULTS				CHILDREN			
TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)	TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)
	AFC	HFC			AFC	HFC	
General Public							
Fillet with skin							
Total	1.0-2.7	1.4-50	9U,98 ^b ,101 ^b ,48	Total Aroclors	2.3	1.7-64	9U,98 ^b ,101 ^b ,48 ^b
Aroclors			(4)				(4)
Total DDT	—	3.2-3.5	9U,48 (4)	Total DDT	—	4.1-4.5	9U,48 (4)
Mercury	—	1.2-2.6	98,101,48 (4)	Mercury	—	1.6-3.4	98,101,48 (4)
Whole body							
Total	1.2	2.8-23	9U,98 ^b ,101 ^b ,48 ^b	Total Aroclors	1.1	3.6-29	9U,98 ^b ,101 ^b ,48 ^b
Aroclors			(4)				(4)
Total DDT	—	3.1	9U,48 (4)	Total DDT	—	4.0	9U,48 (4)
Mercury	—	1.1-1.9	98,101,48 (4)	Mercury	—	1.3-2.4	98,101,48 (4)

Native American

Fillet with skin

Total	1.2-22	3.7-	9U,98,101 ^b ,48
Aroclors		140	(4)
Total DDT	1.4-1.6	8.7-9.6	9U,48 (4)
Mercury	1.2	3.4-7.2	98 ^b ,101 ^b ,48 (4)

Total Aroclors	1.1-41	7.2-	9U,98,101,48 (4)
Total DDT	2.6-2.9	17-19	9U,48 (4)
Mercury	1.0-2.1	6.5-14	98,101,48 (4)
Selenium	—	1.0-1.5	9U,101,48 (4)

Whole body

Total	1.2-10	7.6-63	9U,98,101 ^b ,48 (4)
Aroclors			(4)
Total DDT	1.4	8.6	9U,48 (4)
Mercury	—	2.9-5.1	98,101,48 (4)
Selenium	—	1.1-1.3	9U,101,48 (4)

Total Aroclors	2.3-19	15-120	9U,98,101,48 (4)
Total DDT	2.6	1.1-17	9U,101 ^b ,48 (4)
Mercury	1.2-1.5	5.6-9.9	98,101 ^b ,48 (4)
Selenium	—	1.4-2.5	9U,98,101,48 (4)
Zinc	—	1.3	98 (4)

NOTE: AFC - average fish consumption
HFC - high fish consumption

— - value less than 1.0
Bold indicates site with highest HQ

- ^a Site - Waterbody: 9U - located in the upper Columbia River above the Snake River; 98 - Deschutes River; 101 - Umatilla River; 48 - Yakima River.
^b HFC only

Cancer Risk Estimates

Cancer risks were estimated for general public and Columbia River Basin Native American adults at both 30- and 70-year exposure durations. Cancer risk estimates for detected carcinogenic chemicals at each sampling site are presented in Appendix I. Total cancer risk estimates are presented in Table 3.3 for each sampling site and for the basin average. Sampling sites were not replicated within a tributary and, therefore, tributary risk estimates were not calculated for mountain whitefish.

Table 3.3 Total excess cancer risks for mountain whitefish

CONSUMPTION RATE/ EXPOSURE DURATION	TISSUE TYPE	TOTAL EXCESS CANCER RISK				
		SITE ^e				BASIN AVERAGE
		9 U	48	98	101	
General Public ^{a,b}						
AFC/30-yr	FS	2x10 ⁻⁴	6x10 ⁻⁵	1x10 ⁻⁵	6x10 ⁻⁶	7x10 ⁻⁵
	WB	8x10 ⁻⁵	6x10 ⁻⁵	2x10 ⁻⁵	9x10 ⁻⁶	4x10 ⁻⁵
HFC/30-yr	FS	4x10 ⁻³	1x10 ⁻³	3x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻³
	WB	1x10 ⁻³	1x10 ⁻³	4x10 ⁻⁴	2x10 ⁻⁴	7x10 ⁻⁴
AFC/70-yr	FS	5x10 ⁻⁴	1x10 ⁻⁴	3x10 ⁻⁵	1x10 ⁻⁵	2x10 ⁻⁴
	WB	2x10 ⁻⁴	1x10 ⁻⁴	4x10 ⁻⁵	2x10 ⁻⁵	9x10 ⁻⁵
HFC/70-yr	FS	9x10 ⁻³	2x10 ⁻³	6x10 ⁻⁴	2x10 ⁻⁴	3x10 ⁻³
	WB	3x10 ⁻³	2x10 ⁻³	8x10 ⁻⁴	4x10 ⁻⁴	2x10 ⁻³
Native American ^{c,d}						
AFC/30-yr	FS	2x10 ⁻³	5x10 ⁻⁴	1x10 ⁻⁴	5x10 ⁻⁵	6x10 ⁻⁴
	WB	7x10 ⁻⁴	5x10 ⁻⁴	2x10 ⁻⁴	8x10 ⁻⁵	3x10 ⁻⁴

CONSUMPTION RATE/ EXPOSURE DURATION	TISSUE TYPE	TOTAL EXCESS CANCER RISK				
		SITE ^e				BASIN AVERAGE
		9 U	48	98	101	
HFC/30-yr	FS	1x10 ⁻²	3x10 ⁻³	7x10 ⁻⁴	3x10 ⁻⁴	4x10 ⁻³
	WB	4x10 ⁻³	3x10 ⁻³	1x10 ⁻³	5x10 ⁻⁴	2x10 ⁻³
AFC/70-yr	FS	4x10 ⁻³	1x10 ⁻³	3x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻³
	WB	2x10 ⁻³	1x10 ⁻³	4x10 ⁻⁴	2x10 ⁻⁴	8x10 ⁻⁴
HFC/70-yr	FS	2x10 ⁻²	7x10 ⁻³	2x10 ⁻³	7x10 ⁻⁴	8x10 ⁻³
	WB	9x10 ⁻³	7x10 ⁻³	2x10 ⁻³	1x10 ⁻³	5x10 ⁻³

NOTE: AFC - average fish consumption
HFC - high fish consumption

FS - fillet with skin
WB - whole body

- ^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 7.5 g/day, or 1 8-oz meal per month (USEPA 2000b).
- ^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month (USEPA 2000b).
- ^c AFC risk based on average consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month (CRITFC 1994).
- ^d HFC risk based on 99th percentile consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month (CRITFC 1994).
- ^e Site - Waterbody: 9U - located in the upper Columbia River above the Snake River; 48 - Yakima River; 98 - Deschutes River; 101 - Umatilla River.

Carcinogenic Chemicals with Estimated Risks At or Above 10⁻⁵

Cancer risk estimates vary across populations, consumption rates, and exposure levels by constant factors. Chemicals in whitefish with cancer risks at or above 1 x 10⁻⁵ are shown for the Columbia River Basin Native American population with average fish consumption rates at a 70-year exposure duration; total cancer risk for all chemicals are also shown (Tables 3.4.1 and 3.4.2). Multiplicative factors used to estimate risk at different exposure parameters and target populations are footnoted in the table. In addition, Appendix I shows individual risk estimates for each detected chemical for all the exposure scenarios used in this risk assessment.

Adjusted Aroclors had the highest or second highest risk estimate for all sites and tissue types. Adjusted Aroclors were composed of different Aroclors at each site: 1254 and 1260 at Site 48; 1254 at Site 98; 1260 at Site 101; and 1242, 1254, and 1260 at Site 9U. PCB 126 had the highest risk estimate for both tissue types at Site 98, and for fillet with skin samples at Site 9U. The remaining chemicals varied among sites and tissue types.

Table 3.4.1 Chemicals with cancer risks at or above 1×10^{-5} for Columbia River Basin Native American adult, at average fish consumption, and 70-year exposure for mountain whitefish, whole body

		Mountain Whitefish - Whole body			
		Site			
	Chemical	9U	48	98	101
PCBs	Adjusted Aroclors	4E-04	2E-04	7E-05	5E-05
	PCB 105	8E-05	5E-05	2E-05	
	PCB 114	4E-05			
	PCB 118	1E-04	1E-04	3E-05	1E-05
	PCB 126	2E-04	1E-04	1E-04	
	PCB 156	2E-04	1E-04	3E-05	1E-05
	PCB 157	3E-05			
Dioxin/furans	1,2,3,7,8-PeCDD	2E-05	2E-05	2E-05	3E-05
	2,3,4,7,8-PeCDF	2E-05	2E-05		
	2,3,7,8-TCDD	2E-05	3E-05		
	2,3,7,8-TCDF	1E-04	8E-05	2E-05	
Pesticides	DDD	3E-05	1E-05		
	DDE	2E-04	2E-04		1E-05
	DDT		1E-05		
	Aldrin	3E-05			
Inorganic	Arsenic	2E-05	2E-05	2E-05	2E-05
Total Cancer Risk for All Chemicals		2E-03	1E-03	4E-04	2E-04

Table 3.4.2 Chemicals with cancer risks at or above 1×10^{-5} for Columbia River Basin Native American adults at average fish consumption and 70-year exposure duration for mountain whitefish, fillet with skin

		Mountain Whitefish - Fillet w-skin			
		Site			
	Chemical	9U	48	98	101
PCBs	Adjusted Aroclors	7E-04	3E-04	4E-05	2E-05
	PCB 105	3E-04	4E-05	1E-05	
	PCB 114	1E-04	2E-05		
	PCB 118	7E-04	9E-05	3E-05	
	PCB 123	1E-05			
	PCB 126	8E-04	1E-04	8E-05	
	PCB 156	5E-04	1E-04	3E-05	
	PCB 157	1E-04	2E-05		
Dioxin/furans	1,2,3,7,8-PeCDD	2E-05	2E-05	3E-05	2E-05
	2,3,4,7,8-PeCDF	2E-05			
	2,3,7,8-TCDD	3E-05	2E-05		
	2,3,7,8-TCDF	2E-04	5E-05		
Pesticides	DDD	2E-05	1E-05		
	DDE	2E-04	2E-04		
	DDT		2E-05		
	Aldrin	4E-05			
Inorganic	Arsenic	2E-05	2E-05		1E-05
Total Cancer Risk for All Chemicals		4E-03	1E-03	3E-04	1E-04

NOTE: A blank indicates that this chemical does not have a cancer risk greater than 1×10^{-5} for this tissue type at this site.

To estimate risk levels for general public AFC 30-year exposure, divide the cells in this table by 19.64.

To estimate risk levels for general public HFC 30-year exposure, divide the cells in this table by 1.03.

To estimate risk levels for Native American AFC 30-year exposure, divide the cells in this table by 2.34.

To estimate risk levels for Native American HFC 30-year exposure, divide the cells in this table by 0.38.

To estimate risk levels for general public AFC 70-year exposure, divide the cells in this table by 8.43.

To estimate risk levels for general public HFC 70-year exposure, divide the cells in this table by 0.44.

To estimate risk levels for Native American AFC 70-year exposure, divide the cells in this table by 0.16.

AFC = average fish consumption

HFC = high fish consumption

^a Site - Waterbody: 9U - located in the upper Columbia River above the Snake River; 48 - Yakima River; 98 - Deschutes River; 101 - Umatilla River.

Appendix O-4 White Sturgeon

White sturgeon were collected from six sites in the Columbia River Basin: 6, 7, 8, 9L, and 9U in the Columbia River and Site 13 in the Snake River. Chemical analyses were performed on two tissue types, fillet without skin and whole body. Fillet without skin samples were analyzed for each of the six sampling sites; whole body samples were analyzed for sites 8, 9L, and 9U. The risk estimates characterized in this section are based on average chemical concentrations determined from 3 replicate composite samples collected from each site except for Site 9U, which had 1 composite for fillet without skin samples and 5 replicate composites for whole body samples, and for Site 13, which had 4 replicate composites for fillet without skin samples (Appendix A). Data are presented at two spatial scales: site and basin. White sturgeon were not collected from replicate sampling sites within a tributary and, therefore, tributary risk estimates were not calculated.

Noncarcinogenic Health Effects

The potential noncarcinogenic health effects associated with the consumption of fillet without skin and whole body white sturgeon were assessed by calculating hazard quotients for all detected chemicals with oral reference doses (Appendix G). The hazard quotients of chemicals with the same health endpoint were summed to calculate endpoint-specific hazard indices. In addition, the hazard quotients of all detected chemicals were summed to calculate a total hazard index for the site or basin. Table 4.1 shows the total hazard index for each of the target populations evaluated in this risk assessment and the health endpoints which had hazard indices at or above 1.0.

Table 4.1 Total hazard indices and noncarcinogenic health endpoints with hazard indices at or above 1.0 for white sturgeon

CONSUMPTION RATE/ TISSUE TYPE			HAZARD INDEX						
			SITE ^a						BASIN AVERAGE
HEALTH ENDPOINT			6	7	8	9L	9U	13	
General Public - Adult^{a,b}									
AFC	FW	Immune system	–	–	–	–	2.1	–	0.6
		Total HI	0.8	0.6	0.6	1.2	2.9	0.9	0.9
AFC	WB	Immune system	na	na	1.1	–	–	na	0.9
		Total HI	na	na	1.5	1.0	1.2	na	1.3
HFC	FW	Liver	2.3	2.1	2.2	4.0	7.7	2.5	3.1
		Central nervous system	2.4	2.2	1.0	2.2	7.3	6.2	3.1
		Immune system	9.9	5.9	7.1	16	40	7.9	11

CONSUMPTION RATE/ TISSUE TYPE			HEALTH ENDPOINT	HAZARD INDEX					BASIN AVERAGE	
				SITE ^e						
				6	7	8	9L	9U		13
			Reproduction/development	2.4	2.2	1.0	2.2	7.3	6.2	3.1
			Total HI	15	11	11	23	55	17	18
HFC	WB		Liver	na	na	4.0	3.2	3.8	na	3.8
			Central nervous system	na	na	3.5	2.7	1.9	na	2.8
			Immune system	na	na	20	13	16	na	17
			Reproduction/development	na	na	3.5	2.6	1.9	na	2.7
			Total HI	na	na	29	20	23	na	24
General Public - Child ^{a,b}										
AFC	FW		Immune system	—	—	—	—	1.8	—	0.5
			Total HI	0.7	0.5	0.5	1.1	2.6	0.8	0.8
AFC	WB		Total HI	na	na	1.3	0.9	1.1	na	1.1
HFC	FW		Liver	2.9	2.6	2.8	5.1	9.8	3.2	4.0
			Central nervous system	3.1	2.9	1.3	2.8	9.4	7.9	4.0
			Immune system	13	7.6	9.1	21	51	10	14
			Reproduction/development	3.1	2.9	1.3	2.8	9.4	7.9	4.0
			Total HI	19	14	14	29	70	22	23
HFC	WB		Liver	na	na	5.1	4.1	4.9	na	4.9
			Central nervous system	na	na	4.5	3.4	2.4	na	3.9
			Immune system	na	na	26	16	21	na	22
			Reproduction/development	na	na	4.4	3.3	2.4	na	3.8
			Total HI	na	na	37	25	29	na	31
Native American - Adult ^{c,d}										
AFC	FW		Liver	1.0	—	—	1.8	3.4	1.1	1.4
			Central nervous system	1.1	—	—	—	3.3	2.8	1.4
			Immune system	4.4	2.6	3.1	7.2	18	3.5	5.0
			Reproduction/development	1.1	—	—	—	3.3	2.8	1.4
			Total HI	6.6	4.7	4.7	10	24	7.5	7.9
AFC	WB		Liver	na	na	1.8	1.4	1.7	na	1.7
			Central nervous system	na	na	1.6	1.2	—	na	1.2
			Immune system	na	na	9.0	5.7	7.3	na	7.4
			Reproduction/development	na	na	1.5	1.2	—	na	1.2
			Total HI	na	na	13	8.8	10	na	11
HFC	FW		Liver	6.2	5.6	6.1	11	21	6.8	8.5
			Central nervous system	6.6	6.1	2.8	6.0	20	17	8.5
			Immune system	27	16	19	44	108	22	31
			Reproduction/development	6.6	6.1	2.8	6.0	20	17	8.5
			Selenosis	—	1.3	1.5	2.0	—	—	1.2
			Total HI	40	29	29	62	150	46	49
HFC	WB		Liver	na	na	11	8.8	10	na	10
			Central nervous system	na	na	9.6	7.2	5.1	na	7.6
			Immune system	na	na	56	35	45	na	45
			Reproduction/development	na	na	9.5	7.1	5.1	na	7.5
			Total HI	na	na	79	54	62	na	66
Native American - Child ^{e,d}										

CONSUMPTION			HAZARD INDEX						
RATE/ TISSUE TYPE		HEALTH ENDPOINT	SITE ^a						BASIN AVERAGE
			6	7	8	9L	9U	13	
AFC	FW	Liver	1.8	1.7	1.8	3.2	6.2	2.0	2.5
		Central nervous system	2.0	1.8	—	1.8	6.0	5.1	2.5
		Immune system	8.0	4.8	5.8	13	32	6.4	9.2
		Reproduction/development	2.0	1.8	—	1.8	6.0	5.1	2.5
		Total HI	12	8.6	8.6	18	45	14	14
AFC	WB	Liver	na	na	3.2	2.6	3.1	na	3.1
		Central nervous system	na	na	2.9	2.2	1.5	na	2.5
		Immune system	na	na	17	10	13	na	14
		Reproduction/development	na	na	2.8	2.1	1.5	na	2.4
		Total HI	na	na	24	16	18	na	20
HFC	FW	Liver	12	11	12	21	41	13	16
		Cardiovascular	1.1	1.2	1.2	1.2			1.1
		Central nervous system	13	12	5.5	12	39	33	16
		Immune system	52	32	38	86	210	42	60
		Reproduction/development	13	12	5.5	12	39	33	16
		Hyperpigmentation/keratosis	1.1	1.2	1.2	1.2	—	—	1.1
		Selenosis	—	2.6	2.9	3.8	1.4	1.5	2.3
		Total HI	79	56	56	120	290	89	94
HFC	WB	Liver	na	na	21	17	20	na	20
		Cardiovascular	na	na	1.8	1.1	1.0	na	1.4
		Central nervous system	na	na	19	14	10	na	16
		Immune system	na	na	110	69	87	na	91
		Reproduction/development	na	na	18	14	9.9	na	16
		Hyperpigmentation/keratosis	na	na	1.8	1.1	1.0	na	1.4
		Selenosis	na	na	1.1	1.7	1.4	na	1.3
		Gastrointestinal	na	na	1.1	1.8	—	na	1.1
	Total HI	na	na	150	110	120	na	130	

NOTE: AFC - average fish consumption
HFC - high fish consumption
HI - hazard index

na - not applicable; sample type
not analyzed at this site
-- health endpoint <1.0 at that
site

FW - fillet without
skin
WB - whole body

^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public (adult) of 7.5 g/day, or 1 8-oz meal per month, and for general public (child) of 2.83 g/day, or 0.4 8-oz meal per month (USEPA 2000b).

^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month, and for general public (child) of 77.95 g/day, or 11 8-oz meals per month (USEPA 2000b).

^c AFC risk based on average consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month, and for child fish consumers of 24.8 g/day, or 3 8-oz meals per month (CRITFC 1994).

^d HFC risk based on 99th percentile consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month, and for child fish consumers of 162 g/day, or 22 8-oz meals per month (CRITFC 1994).

- * Site - Waterbody: 6 - located in the Columbia River between the Bonneville Dam and the Dalles Dam; 7 - located in the Columbia River between the Dalles Dam and the John Day Dam; 8 - located in the Columbia River between the John Day Dam and the McNary Dam; 9L - located in the upper Columbia River below the Snake River; 9U, located in the upper Columbia River above the Snake River; 13 - Snake River.

Up to eight health endpoints exceeded a value of 1.0 for white sturgeon depending on the target population and exposure parameters used for calculations. The eight endpoints were immune system, liver, central nervous system, reproduction/development, selenosis, cardiovascular, hyperpigmentation/keratosis, and gastrointestinal in decreasing order of toxicity based on basin average total hazard indices of whole body samples. Among specific sampling sites, total hazard indices were generally lowest at Site 7 and Site 8 for fillet without skin samples and Site 9L for whole body samples. Total hazard indices were highest at Site 9U for fillet without skin samples and at Site 8 for whole body samples. Total indices among sites varied by a factor of 5.2 for fillet with skin samples and by 1.5 for whole body samples.

Chemicals With Hazard Quotients At or Above 1.0

Individual chemicals with a hazard quotient at or above 1.0 collected from six sites in fillet without skin samples of white sturgeon and from three sites in whole body samples were identified and shown in Table 4.2. Hazard quotients for other individual chemicals are presented in Appendix G. A total of four individual chemicals were identified with hazard quotients at or above 1.0 in fillet without skin samples of white sturgeon: total Aroclors, mercury, total DDT, and selenium, in decreasing order of toxicity based on the Native American child, high fish consumption rate. A total of six individual chemicals were identified with hazard quotients at or above 1.0 in whole body samples of white sturgeon: total Aroclors, total DDT, mercury, arsenic, chromium, and selenium, in decreasing order of toxicity based on the Native American child, high fish consumption rate. Total Aroclors were comprised of Aroclor 1254 and Aroclor 1260, depending on the sampling site.

Table 4.2 . Chemicals having hazard quotients at or above 1.0 in white sturgeon

ADULTS				CHILDREN			
TISSUE TYPE/CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)	TISSUE TYPE/CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)
	AFC	HFC			AFC	HFC	
General Public							
Fillet without skin							
Total Aroclors	2.1	5.9-40	6 ^b ,7 ^b ,8 ^b ,9L ^b ,9U,13 ^b (6)	Total Aroclors	1.8	7.6-51	6 ^b ,7 ^b ,8 ^b ,9L ^b ,9U,13 ^b (6)
Total DDT	—	1.5-7.1	6,7,8,9L,9U,13 (6)	Total DDT	—	1.9-9.1	6,7,8,9L,9U,13 (6)
Mercury	—	1.0-7.3	6,7,8,9L,9U,13 (6)	Mercury	—	1.3-9.4	6,7,8,9L,9U,13 (6)
Whole body							
Total Aroclors	1.1	13-20	8,9L ^b ,9U ^b (3)	Total Aroclors	—	17-26	8,9L,9U (3)
Total DDT	—	2.6-3.7	8,9L,9U (3)	Total DDT	—	3.4-4.7	8,9L,9U (3)
Mercury	—	1.9-3.5	8,9L,9U (3)	Mercury	—	2.4-4.4	8,9L,9U (3)
Native American							
Fillet skin							
Total Aroclors	2.6-18	16-110	6 ^b ,7 ^b ,8 ^b ,9L,9U,13 ^b (6)	Total Aroclors	4.8-32	32-210	6,7,8,9L,9U,13 (6)
Total DDT	1.3-3.2	4.1-20	6,7,8,9L,9U (6)	Total DDT	1.2-5.8	8.0-38	6,7,8,9L,9U,13 (6)
Mercury	1.0-3.3	2.8-20	6,7,8 ^b ,9L ^b ,9U,13 (6)	Arsenic	—	1.1-1.2	6,7,8,9L (6)
Selenium	—	1.3-2.0	7,8,9L (6)	Mercury	1.8-6.0	5.5-39	6,7,8 ^b ,9L,9U,13 (6)
				Selenium	—	1.4-3.8	7,8,9L,9U,13 (6)
Whole body							
Total Aroclors	5.7-9.0	35-56	8,9L,9U (3)	Total Aroclors	11-17	69-110	8,9L,9U (3)
Total DDT	1.2-1.6	7.8-10	8,9L,9U (3)	Total DDT	2.1-3.0	14-20	8,9L,9U (3)
Mercury	1.2-1.5	5.1-9.5	8,9L,9U ^b (3)	Arsenic	—	1.0-1.8	8,9L,9U (3)
				Chromium	—	1.1-1.8	8,9L (3)
				Mercury	1.5-	9.9-19	8,9L,9U (3)

	2.8	
Selenium	–	1.1- 8,9L,9U (3)
		1.7

NOTE: AFC - average fish consumption – - value less than 1.0
HFC - high fish consumption Bold indicates site with highest HQ

- ^a Site - Waterbody: 6 - located in the Columbia River between the Bonneville Dam and the Dalles Dam; 7 - located in the Columbia River between the Dalles Dam and the John Day Dam; 8 - located in the Columbia River between the John Day Dam and the McNary Dam; 9L - located in the upper Columbia River below the Snake River; 9U, located in the upper Columbia River above the Snake River; 13 - Snake River.
- ^b HFC only

Cancer Risks Estimates

Cancer risks were estimated for general public and Columbia River Basin Native American adults at both 30- and 70-year exposure durations. Cancer risk estimates for detected carcinogenic chemicals at each sampling site are presented in Appendix I. Total cancer risk estimates are presented in Table 4.3 for each sampling site and for the basin average. Sampling sites were not replicated within a tributary and, therefore, tributary risk estimates were not calculated.

Table 4.3 Total cancer risk for white sturgeon

CONSUMPTION RATE/ EXPOSURE DURATION	TISSUE TYPE	TOTAL EXCESS CANCER RISK						BASIN AVERAGE
		SITE ^E						
		6	7	8	9L	9U	13	
General Public ^{a,b}								
AFC/30-yr	FW	4x10 ⁻⁵	3x10 ⁻⁵	4x10 ⁻⁵	8x10 ⁻⁵	1x10 ⁻⁴	3x10 ⁻⁵	5x10 ⁻⁵
	WB	na	na	7x10 ⁻⁵	6x10 ⁻⁵	7x10 ⁻⁵	na	7x10 ⁻⁵
HFC/30-yr	FW	8x10 ⁻⁴	6x10 ⁻⁴	7x10 ⁻⁴	1x10 ⁻³	2x10 ⁻³	6x10 ⁻⁴	9x10 ⁻⁴
	WB	na	na	1x10 ⁻³	1x10 ⁻³	1x10 ⁻³	na	1x10 ⁻³
AFC/70-yr	FW	9x10 ⁻⁵	7x10 ⁻⁵	8x10 ⁻⁵	2x10 ⁻⁴	3x10 ⁻⁴	7x10 ⁻⁵	1x10 ⁻⁴
	WB	na	na	2x10 ⁻⁴	1x10 ⁻⁴	2x10 ⁻⁴	na	2x10 ⁻⁴
HFC/70-yr	FW	2x10 ⁻³	1x10 ⁻³	2x10 ⁻³	3x10 ⁻³	5x10 ⁻³	1x10 ⁻³	2x10 ⁻³
	WB	na	na	3x10 ⁻³	3x10 ⁻³	3x10 ⁻³	na	3x10 ⁻³
Native American ^{c,d}								
AFC/30-yr	FW	3x10 ⁻⁴	3x10 ⁻⁴	3x10 ⁻⁴	6x10 ⁻⁴	1x10 ⁻³	3x10 ⁻⁴	4x10 ⁻⁴
	WB	na	na	6x10 ⁻⁴	5x10 ⁻⁴	6x10 ⁻⁴	na	6x10 ⁻⁴

CONSUMPTION RATE/ EXPOSURE DURATION	TISSUE TYPE	TOTAL EXCESS CANCER RISK						
		SITE ^e						BASIN AVERAGE
		6	7	8	9L	9U	13	
HFC/30-yr	FW	2x10 ⁻³	2x10 ⁻³	2x10 ⁻³	4x10 ⁻³	6x10 ⁻³	2x10 ⁻³	3x10 ⁻³
	WB	na	na	4x10 ⁻³	3x10 ⁻³	4x10 ⁻³	na	3x10 ⁻³
AFC/70-yr	FW	8x10 ⁻⁴	6x10 ⁻⁴	7x10 ⁻⁴	1x10 ⁻³	2x10 ⁻³	6x10 ⁻⁴	1x10 ⁻³
	WB	na	na	1x10 ⁻³	1x10 ⁻³	1x10 ⁻³	na	1x10 ⁻³
HFC/70-yr	FW	5x10 ⁻³	4x10 ⁻³	4x10 ⁻³	9x10 ⁻³	1x10 ⁻²	4x10 ⁻³	6x10 ⁻³
	WB	na	na	9x10 ⁻³	7x10 ⁻³	8x10 ⁻³	na	8x10 ⁻³

NOTE: AFC - average fish consumption
HFC - high fish consumption
na - not applicable; sample type not analyzed at this site
FW - fillet without skin
WB - whole body

^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 7.5 g/day, or 1 8-oz meal per month (USEPA 2000b).

^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month (USEPA 2000b).

^c AFC risk based on average consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month (CRITFC 1994).

^d HFC risk based on 99th percentile consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month (CRITFC 1994).

^e Site - Waterbody: 6 - located in the Columbia River between the Bonneville Dam and the Dalles Dam; 7 - located in the Columbia River between the Dalles Dam and the John Day Dam; 8 - located in the Columbia River between the John Day Dam and the McNary Dam; 9U, located in the upper Columbia River above the Snake River; 9L - located in the upper Columbia River below the Snake River; 13 - Snake River.

Carcinogenic Chemicals with Estimated Risks At or Above 10⁻⁵

Cancer risk estimates vary across populations, consumption rates, and exposure levels by constant factors. Chemicals in white sturgeon with cancer risks at or above 1 x 10⁻⁵ are shown for the Columbia River Basin Native American population with average fish consumption rates at a 70-year exposure duration; total cancer risk for all chemicals are also shown (Tables 4.4.1 and 4.4.2). Multiplicative factors used to estimate risk at different exposure parameters and target populations are footnoted in the table. In addition, Appendix I shows individual risk estimates for each detected chemical for all the exposure scenarios used in this risk assessment

The same three chemicals were identified as having the highest cancer risk for all sites and tissue types for white sturgeon: 2,3,7,8-TCDF, adjusted Aroclors, and DDE. The highest risk estimate of the three chemicals varied among sites, although 2,3,7,8-TCDF was the highest for most of the fillet without skin samples. Aroclors 1254 and 1260 were the only

individual Aroclors detected and used in the adjusted Aroclor calculation for all sites and tissue types.

Table 4.4.1 Chemicals with cancer risks at or above 1×10^{-5} for Columbia River Basin Native American population at average fish consumption and 70-year exposure duration in white sturgeon, whole body

		White Sturgeon - Whole body		
		Site		
	Chemical	8	9L	9U
PCBs	Adjusted Aroclors	3E-04	2E-04	3E-04
	PCB 105	6E-05	4E-05	5E-05
	PCB 114	2E-05	2E-05	2E-05
	PCB 118	7E-05	5E-05	5E-05
	PCB 156	1E-04	9E-05	9E-05
	PCB 157	2E-05	2E-05	2E-05
	2,3,4,7,8-PeCDF	2E-05	3E-05	2E-05
Dioxin/furans	2,3,7,8-TCDD	9E-05	1E-04	9E-05
	2,3,7,8-TCDF	3E-04	3E-04	4E-04
Pesticides	Aldrin		2E-05	2E-05
	Chlordane (total)		1E-05	
	DDD	2E-05	3E-05	5E-05
	DDE	2E-04	2E-04	2E-04
	Hexachlorobenzene		2E-05	1E-05
Inorganic	Arsenic	7E-05	4E-05	4E-05
Total Cancer Risk for All Chemicals		1E-03	1E-03	1E-03

Table 4.4.2 Chemicals with cancer risks at or above 1×10^{-5} for Columbia River Basin Native American population at average fish consumption and 70-year exposure duration in white sturgeon, fillet without skin

		White Sturgeon - Fillet without skin					
		Site					
	Chemical	6	7	8	13	9L	9U
PCBs	Adjusted Aroclors	2E-04	1E-04	1E-04	1E-04	3E-04	7E-04
	PCB 105	3E-05	2E-05	2E-05	3E-05	4E-05	1E-04
	PCB 114	1E-05			1E-05	2E-05	5E-05
	PCB 118	3E-05	2E-05	2E-05	4E-05	5E-05	2E-04
	PCB 126		2E-05				
	PCB 156	4E-05	3E-05	3E-05	5E-05	9E-05	2E-04
	PCB 157					2E-05	5E-05
Dioxin/furans	1,2,3,7,8-PeCDD	1E-05	2E-05	2E-05	1E-05		
	2,3,4,7,8-PeCDF		1E-05	2E-05		2E-05	2E-05
	2,3,7,8-TCDD	4E-05	5E-05	6E-05	5E-05	1E-04	3E-05
	2,3,7,8-TCDF	2E-04	2E-04	2E-04	6E-05	5E-04	3E-04
Pesticides	Aldrin					2E-05	1E-05
	Chlordane (total)					1E-05	2E-05
	DDD	1E-05	1E-05	1E-05	1E-05	4E-05	8E-05
	DDE	1E-04	1E-04	1E-04	1E-04	2E-04	4E-04
	Hexachlorobenzene					2E-05	
Inorganic	Arsenic	4E-05	5E-05	5E-05	3E-05	5E-05	4E-05
Total Cancer Risk for All Chemicals		8E-04	6E-04	7E-04	6E-04	1E-03	2E-03

NOTE: A blank indicates that this chemical does not have a cancer risk greater than 1×10^{-5} for this tissue type at this site.

- 19.64. To estimate risk levels for general public AFC 30-year exposure, divide the cells in this table by
- 1.03. To estimate risk levels for general public HFC 30-year exposure, divide the cells in this table by
- 2.34. To estimate risk levels for Native American AFC 30-year exposure, divide the cells in this table by
- 0.38. To estimate risk levels for Native American HFC 30-year exposure, divide the cells in this table by
- 8.43. To estimate risk levels for general public AFC 70-year exposure, divide the cells in this table by
- 0.44. To estimate risk levels for general public HFC 70-year exposure, divide the cells in this table by
- 0.16. To estimate risk levels for Native American AFC 70-year exposure, divide the cells in this table by

^a Site - Waterbody: 6 - located in the Columbia River between the Bonneville Dam and the Dalles Dam; 7 - located in the Columbia River between the Dalles Dam and the John Day Dam; 8 - located in the Columbia River between the John Day Dam and the McNary Dam; 9U, located in the upper Columbia River above the Snake River; 9L - located in the upper Columbia River below the Snake River; 13 - Snake River.

Appendix O-5 Walleye

Walleye were collected from two sites in the Columbia River Basin: 7, Columbia River and 30, Umatilla River. Chemical analyses were performed on two tissue types, fillet with skin and whole body, except for fish collected from Site 7 where only whole body samples were analyzed. The risk estimates characterized in this section are based on average chemical concentrations determined from two replicate composite samples collected from Site 7 and three replicate composite samples collected from Site 30 for fillet with skin samples and one composite sample for whole body samples at Site 30 (Appendix A). Data are presented at two spatial scales: site and basin. Walleye were not collected from replicate sampling sites within a tributary and, therefore, tributary risk estimates were not calculated.

Noncarcinogenic Health Effects

The potential noncarcinogenic health effects associated with the consumption of fillet with skin and whole body walleye were assessed by calculating hazard quotients for all detected chemicals with oral reference doses (Appendix G). The hazard quotients of chemicals

with the same health endpoint were summed to calculate endpoint-specific hazard indices. In addition, the hazard quotients of all detected chemicals were summed to calculate a total hazard index for the site or basin. Table 5.1 shows the total hazard index for each of the target populations evaluated in this risk assessment and the health endpoints which were at or above a hazard index of 1.0.

Table 5.1 Total hazard indices and noncarcinogenic health endpoints with hazard indices exceeding 1.0 for walleye

CONSUMPTION RATE/ TISSUE TYPE			HAZARD INDEX		
			SITE ^e		BASIN AVERAGE ^f
			7	30	
General Public - Adult^{a,b}					
AFC	FS	Total HI	na	0.3	0.3
AFC	WB	Total HI	1.1	0.4	1.0
HFC	FS	Liver	na	1.3	1.3
		Central nervous system	na	3.6	3.6
		Immune system	na	1.3	1.3
		Reproduction and development	na	3.6	3.6
		Total HI	na	6.6	6.6
HFC	WB	Liver	2.4	—	2.3
		Central nervous system	4.2	3.6	3.6
		Immune system	13	2.3	13
		Reproduction and development	4.2	3.6	3.6
		Total HI	21	6.7	20
General Public - Child^{a,b}					
AFC	FS	Total HI	na	0.3	0.3
AFC	WB	Total HI	1.0	0.3	0.9
HFC	FS	Liver	na	1.6	1.6
		Central nervous system	na	4.6	4.6
		Immune system	na	1.6	1.6
		Reproduction and development	na	4.6	4.6
		Total HI	na	8.4	8.4
HFC	WB	Liver	3.1	—	2.9
		Central nervous system	5.4	4.6	4.6
		Immune system	17	2.9	16
		Reproduction and development	5.4	4.6	4.6
		Total HI	27	8.6	25
Native American - Adult^{c,d}					
AFC	FS	Central nervous system	na	1.6	1.6
		Reproduction and development	na	1.6	1.6
		Total HI	na	2.9	2.9

CONSUMPTION RATE/ TISSUE TYPE			HAZARD INDEX		
			SITE ^e		BASIN
			7	30	AVERAGE ^f
HEALTH ENDPOINT					
AFC	WB	Liver	1.1	—	1.0
		Central nervous system	1.9	1.6	1.6
		Immune system	5.9	1.0	5.7
		Reproduction and development	1.9	1.6	1.6
		Total HI	9.2	3.0	8.7
HFC	FS	Liver	na	3.5	3.5
		Central nervous system	na	9.8	9.8
		Immune system	na	3.5	3.5
		Reproduction and development	na	9.7	9.7
		Total HI	na	18	18
HFC	WB	Liver	6.7	1.1	6.2
		Central nervous system	12	9.8	9.9
		Immune system	36	6.3	35
		Reproduction and development	12	9.7	9.9
		Total HI	57	18	53
Native American - Child ^{c,d}					
AFC	FS	Liver	na	1.0	1.0
		Central nervous system	na	2.9	2.9
		Immune system	na	1.0	1.0
		Reproduction and development	na	2.9	2.9
		Total HI	na	5.3	5.3
AFC	WB	Liver	2.0	—	1.9
		Central nervous system	3.4	2.9	3.0
		Immune system	11	1.9	10
		Reproduction and development	3.4	2.9	2.9
		Total HI	17	5.5	16
HFC	FS	Liver	na	6.8	6.8
		Cardiovascular	na	1.3	1.3
		Central nervous system	na	19	19
		Immune system	na	6.8	6.8
		Reproduction and development	na	19	19
		Hyperpigmentation/keratosis	na	1.3	1.3
		Total HI	na	35	35
HFC	WB	Liver	13	2.2	12
		Cardiovascular	1.8	1.3	1.8
		Central nervous system	22	19	19
		Immune system	71	12	68
		Reproduction and development	22	19	19
		Hyperpigmentation/keratosis	1.8	1.3	1.8
		Selenosis	1.1	—	1.0

CONSUMPTION RATE/ TISSUE TYPE	HEALTH ENDPOINT	HAZARD INDEX		
		SITE ^a		BASIN
		7	30	AVERAGE ^f
	Total HI	110	36	104

NOTE: AFC - average fish consumption na - not applicable; sample type not analyzed at this site FS - fillet with skin
HFC - high fish consumption
HI - hazard index -- health endpoint <1.0 at that site WB - whole body

- ^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public (adult) of 7.5 g/day, or 1 8-oz meal per month, and for general public (child) of 2.83 g/day, or 0.4 8-oz meal per month (USEPA 2000b).
- ^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month, and for general public (child) of 77.95 g/day, or 11 8-oz meals per month (USEPA 2000b).
- ^c AFC risk based on average consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month, and for child fish consumers of 24.8 g/day, or 3 8-oz meals per month (CRITFC 1994).
- ^d HFC risk based on 99th percentile consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month, and for child fish consumers of 162 g/day, or 22 8-oz meals per month (CRITFC 1994).
- ^e Site - Waterbody: 7 - located in the Columbia River between the Dalles Dam and the John Day Dam; 30 - Umatilla River
- ^f Basin average hazard indices equals Site 30 for FS samples.

Up to seven health endpoints exceeded a value of 1.0 for walleye depending on the target population and exposure parameters used for calculations. The seven endpoints were immune system, central nervous system, reproduction/development, liver, cardiovascular, hyperpigmentation/keratosis, and selenosis in decreasing order of toxicity based on basin average hazard indices. For whole body samples, which were collected at both Site 7 and Site 30, total hazard indices varied by a factor of 3.1 between sites.

Chemicals With Hazard Quotients At or Above 1.0

Individual chemicals with a hazard quotient at or above 1.0 in fillet with skin samples of walleye collected from Site 7 and Site 30 and in whole body samples collected from Site 30 were identified and are shown in Table 5.2. Hazard quotients for other individual chemicals are presented in Appendix G. A total of five individual chemicals were identified as having hazard quotients at or above 1.0 in fillet with skin samples of walleye: mercury, total Aroclors, thallium, arsenic, and total DDT, in decreasing order of toxicity based on the Native American child, high fish consumption rate. A total of five individual chemicals were identified as having hazard quotients at or above 1.0 in whole body

samples of walleye: total Aroclors, mercury, total DDT, arsenic, and selenium, in decreasing order of toxicity based on the Native American child, high fish consumption rate. Total Aroclors were comprised of Aroclor 1254 in fillet with skin samples and Aroclor 1254 and Aroclor 1260 in whole body samples.

Table 5.2 Chemicals having hazard quotients at or above 1.0 in walleye

ADULTS				CHILDREN			
TISSUE TYPE/CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)	TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)
	AFC	HFC			AFC	HFC	
General Public							
Fillet with skin							
Total	—	1.3	30 (1)	Total	—	1.7	30 (1)
Aroclors				Aroclors			
Mercury	—	3.6	30 (1)	Mercury	—	4.6	30 (1)
				Thallium	—	1.1	30 (1)
Whole body							
Total	—	2.3-13	7,30 (2)	Total	—	2.9-17	7,30 (2)
Aroclors				Aroclors			
Total DDT	—	2.1	7 (2)	Total DDT	—	2.7	7 (2)
Mercury	—	3.6-4.2	7,30 (2)	Mercury	—	4.6-5.4	7,30 (2)
Native American							
Fillet with skin							
Total	—	3.5	30 (1)	Total	1.1	6.8	30 (1)
Aroclors				Aroclors			
Mercury	1.6	9.7	30 (1)	Total DDT	—	1.2	30 (1)
				Arsenic	—	1.3	30 (1)
				Mercury	2.9	19	30 (1)
				Thallium	—	4.7	30 (1)
Whole body							
Total	1.0-5.9	6.3-36	7,30 (2)	Total	1.9-11	12-71	7,30 (2)
Aroclors				Aroclors			
Total DDT	—	5.8	7 (2)	Total DDT	1.7	1.3-11	7,30 ^b (2)
Mercury	1.6-1.9	9.7-12	7,30 (2)	Arsenic	—	1.3-1.8	7,30 (2)
				Mercury	2.9-3.4	19-22	7,30 (2)
				Selenium	—	1.1	7 (2)

NOTE: AFC - average fish consumption
HFC - high fish consumption

— - value less than 1.0
Bold indicates site with highest HQ

^a Site - Waterbody: 7 - located in the Columbia River between the Dalles Dam and the John Day Dam; 30 - Umatilla River

Cancer Risk Estimates

Cancer risks were estimated for general public and Columbia River Basin Native American adults at both 30- and 70-year exposure durations. Cancer risk estimates for

detected carcinogenic chemicals at each sampling site are presented in Appendix I. Total cancer risk estimates are presented in Table 5.3 for each sampling site and for the basin average. Sampling sites were not replicated within a tributary and, therefore, tributary risk estimates were not calculated.

Table 5.3 Total cancer risk for walleye

CONSUMPTION RATE/ EXPOSURE DURATION	TISSUE TYPE	TOTAL EXCESS CANCER RISK		
		SITE ^e		BASIN AVERAGE
		7	30	
General Public ^{a,b}				
AFC/30-yr	FS	na	8x10 ⁻⁶	8x10 ⁻⁶
	WB	6x10 ⁻⁵	9x10 ⁻⁶	5x10 ⁻⁵
HFC/30-yr	FS	na	1x10 ⁻⁴	1x10 ⁻⁴
	WB	1x10 ⁻³	2x10 ⁻⁴	1x10 ⁻³
AFC/70-yr	FS	na	2x10 ⁻⁵	2x10 ⁻⁵
	WB	1x10 ⁻⁴	2x10 ⁻⁵	1x10 ⁻⁴
HFC/70-yr	FS	na	3x10 ⁻⁴	3x10 ⁻⁴
	WB	3x10 ⁻³	4x10 ⁻⁴	2x10 ⁻³
Native American ^{c,d}				
AFC/30-yr	FS	na	6x10 ⁻⁵	6x10 ⁻⁵
	WB	5x10 ⁻⁴	7x10 ⁻⁵	4x10 ⁻⁴
HFC/30-yr	FS	na	4x10 ⁻⁴	4x10 ⁻⁴
	WB	3x10 ⁻³	4x10 ⁻⁴	3x10 ⁻³
AFC/70-yr	FS	na	2x10 ⁻⁴	2x10 ⁻⁴
	WB	1x10 ⁻³	2x10 ⁻⁴	1x10 ⁻³
HFC/70-yr	FS	na	9x10 ⁻⁴	9x10 ⁻⁴
	WB	7x10 ⁻³	1x10 ⁻³	6x10 ⁻³

NOTE: AFC - average fish consumption
HFC - high fish consumption
na - not applicable; sample type not analyzed at this site

FS - fillet with skin
WB - whole body

- ^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 7.5 g/day, or 1 8-oz meal per month (USEPA 2000b).
- ^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month (USEPA 2000b).
- ^c AFC risk based on average consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month (CRITFC 1994).
- ^d HFC risk based on 99th percentile consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month (CRITFC 1994).
- ^e Site - Waterbody: 7 - located in the Columbia River between the Dalles Dam and the John Day Dam; 30 - Umatilla River.

Carcinogenic Chemicals with Estimated Risks At or Above 10⁻⁵

Cancer risk estimates vary across populations, consumption rates, and exposure levels by constant factors. Chemicals in walleye with cancer risks at or above 1×10^{-5} are shown for the Columbia River Basin Native American population with average fish consumption rates at a 70-year exposure duration; total cancer risk for all chemicals are also shown (Tables 5.4.1 and 5.4.2). Multiplicative factors used to estimate risk at different exposure parameters and target populations are footnoted in the table. In addition, Appendix I shows individual risk estimates for each detected chemical for all the exposure scenarios used in this risk assessment

Five chemicals have risks at or above 1×10^{-5} in whole body samples at site 7: adjusted Aroclors, PCBs 118, 126 and 156, and DDE. Adjusted Aroclors had the highest risk estimate for whole body samples at Site 7. Whole body and fillet with skin samples at site 30 had no risks above 1×10^{-5} . Aroclors 1254 and 1260 were the only individual Aroclors detected and used in the adjusted Aroclor calculation for all sites and tissue types. Aroclor 1260 was not detected in fillet with skin samples at Site 30. Arsenic had the highest risk estimate for both tissue types at Site 30.

Table 5.4.1 Chemicals with cancer risks at or above 1×10^{-5} for Columbia River Basin Native American population at average fish consumption and 70-year exposure duration in walleye, whole body

		Walleye-Whole Body	
		Site	
	Chemical	7	30
Aroclors	Adjusted Aroclors	2E-04	4E-05
	PCB 105	6E-05	
	PCB 114	3E-05	
	PCB 118	1E-04	
	PCB 126	2E-04	
	PCB 156	1E-04	
	PCB 157	2E-05	
	1,2,3,7,8-PeCDD	3E-05	1E-05
Dioxin/furans	2,3,4,7,8-PeCDF	2E-05	
	2,3,7,8-TCDD	5E-05	1E-05
	2,3,7,8-TCDF	7E-05	

Pesticides	DDD	1E-05	
	DDE	1E-04	1E-05
Inorganic	Arsenic	7E-05	5E-05

Table 5.4.2 Chemicals with cancer risks at or above 1×10^{-5} for Columbia River Basin Native American population at average fish consumption and 70-year exposure duration in walleye, fillet with skin

		Walleye-Fillet with skin
		Site
		30
PCBs	Adjusted Aroclors	2E-05
Dioxin/furans	1,2,3,7,8-PeCDD	1E-05
	2,3,7,8-TCDD	1E-05
Pesticides	DDE	1E-05
Inorganic	Arsenic	5E-05
Total Cancer Risk for All Chemicals		2E-04

NOTE: na - not applicable; indicates that this tissue type was not measured at this site.

A blank indicates that this chemical does not have an estimated cancer risk at or above 10^{-5} for this site and tissue type.

To estimate risk levels for general public AFC 30-year exposure, divide the cells in this table by 19.64.

To estimate risk levels for general public HFC 30-year exposure, divide the cells in this table by 1.03.

To estimate risk levels for Native American AFC 30-year exposure, divide the cells in this table by 2.34.

To estimate risk levels for Native American HFC 30-year exposure, divide the cells in this table by 0.38.

To estimate risk levels for general public AFC 70-year exposure, divide the cells in this table by 8.43.

To estimate risk levels for general public HFC 70-year exposure, divide the cells in this table by 0.44.

To estimate risk levels for Native American AFC 70-year exposure, divide the cells in this table by 0.16.

* Site - Waterbody: 7 - located in the Columbia River between the Dalles Dam and the John Day Dam;

30 - Umatilla River.

Appendix O-6 Rainbow Trout

Rainbow trout were collected from four sites in the Columbia River Basin: 56, Klickitat River; 98, Deschutes River; 101, Umatilla River; and 49, Yakima River. Chemical analyses were performed on two tissue types, fillet with skin and whole body, except at Site 56 and Site 101 where only whole body samples were analyzed. The risk estimates characterized in this section are based on average chemical concentrations determined from 2–4 replicate composite samples. Two replicate composites were analyzed for whole body samples at Site 56, three replicate composites for fillet with skin and whole body

samples at Site 49 and for whole body samples at Site 98, and four replicate composites for fillet with skin samples at Site 98 and Site 101 (Appendix A). Data are presented at two spatial scales: site and basin. Rainbow trout were not collected from replicate sampling sites within a tributary and, therefore, tributary risk estimates were not calculated.

Noncarcinogenic Health Effects

The potential noncarcinogenic health effects associated with the consumption of fillet with skin and whole body rainbow trout were assessed by calculating hazard quotients for all detected chemicals with oral reference doses (Appendix G). The hazard quotients of chemicals with the same health endpoint were summed to calculate endpoint-specific hazard indices. In addition, the hazard quotients of all detected chemicals were summed to calculate a total hazard index for the site or basin. Table 6.1 shows the total hazard index for each of the target populations evaluated in this risk assessment and the health endpoints which were at or above a hazard index of 1.0.

Table 6.1. Total hazard indices and noncarcinogenic health endpoints with hazard indices at or above 1.0 for rainbow trout

CONSUMPTION RATE/ TISSUE TYPE			HAZARD INDEX				
			SITE ^e				BASIN AVERAGE
HEALTH ENDPOINT			56	98	101	49	
General Public - Adult ^{a,b}							
AFC	FS	Total HI	na	0.2	na	0.2	0.2
AFC	WB	Total HI	0.2	0.3	0.1	0.2	0.3
HFC	FS	Central nervous system	na	1.7	na	1.4	1.6
		Immune system	na	1.6	na	1.2	1.4
		Reproduction/ development	na	1.7	na	1.4	1.6
		Total HI	na	3.6	na	3.0	3.4
HFC	WB	Central nervous system	1.6	2.9	–	–	1.5
		Immune system	1.2	1.9	–	1.5	2.3
		Reproduction/ development	1.6	2.9	–	–	1.5
		Total HI	3.9	5.5	2.8	3.3	4.8
General Public - Child ^{a,b}							
AFC	FS	Total HI	na	0.2	na	0.1	0.2
AFC	WB	Total HI	0.2	0.3	0.1	0.2	0.2
HFC	FS	Central nervous system	na	2.1	na	1.8	2.0
		Immune system	na	2.0	na	1.5	1.8
		Reproduction/ development	na	2.1	na	1.8	2.0

CONSUMPTION RATE/ TISSUE TYPE			HAZARD INDEX				BASIN AVERAGE
			SITE ^e				
			56	98	101	49	
		Total HI	na	4.6	na	3.8	4.3
HFC	WB	Central nervous system	2.1	3.7	1.0	1.3	1.9
		Immune system	1.6	2.4	1.2	1.9	3.0
		Reproduction/ development	2.1	3.7	–	1.2	1.9
		Total HI	5.0	7.0	3.6	4.3	6.1
Native American - Adult ^{c,d}							
AFC	FS	Total HI	na	1.6	na	1.3	1.5
AFC	WB	Central nervous system	–	1.3	–	–	0.7
		Reproduction/ development	–	1.3	–	–	0.7
		Total HI	1.7	2.4	1.3	1.5	2.1
HFC	FS	Central nervous system	na	4.6	na	3.9	4.3
		Immune system	na	4.3	na	3.2	3.8
		Reproduction/ development	na	4.6	na	3.9	4.3
		Total HI	na	9.8	na	8.2	9.2
HFC	WB	Liver	–	–	–	1.4	0.8
		Central nervous system	4.5	8.0	2.2	2.7	4.2
		Immune system	3.3	5.2	2.5	4.0	6.4
		Reproduction/ development	4.4	7.9	2.0	2.6	4.0
		Total HI	11	15	7.7	9.1	13
Native American - Child ^{c,d}							
AFC	FS	Central nervous system	na	1.4	na	1.2	1.3
		Immune system	na	1.3	na	–	1.1
		Reproduction/ development	na	1.4	na	1.1	1.3
		Total HI	na	2.9	na	2.4	2.7
AFC	WB	Central nervous system	1.3	2.4	–	–	1.2
		Immune system	–	1.5	–	1.2	1.9
		Reproduction/ development	1.3	2.4	–	–	1.2
		Total HI	3.2	4.4	2.3	2.7	3.9
HFC	FS	Liver	na	–	na	1.6	1.0
		Central nervous system	na	8.9	na	7.5	8.3
		Immune system	na	8.4	na	6.3	7.5
		Reproduction/ development	na	8.9	na	7.5	8.3
		Total HI	na	19	na	16	18
HFC	WB	Liver	1.5	1.1	1.0	2.6	1.5
		Cardiovascular	1.8	–	–	–	0.4
		Central nervous system	8.7	16	4.3	5.3	8.1

CONSUMPTION RATE/ TISSUE TYPE		HAZARD INDEX				BASIN AVERAGE
		SITE ^e				
HEALTH ENDPOINT		56	98	101	49	
	Immune system	6.5	10	4.8	7.7	12
	Metabolism	1.1	1.3	1.3	1.0	1.2
	Reproduction/ development	8.5	15	4.0	5.0	7.8
	Hyperpigmentation/kerato sis	1.8	–	–	–	0.4
	Selenosis	1.3	–	–	–	0.8
	Total HI	21	29	15	18	26

NOTE: AFC - average fish consumption na - not applicable; sample type not analyzed at this site FS - fillet with skin
HFC - high fish consumption -- health endpoint <1.0 at that site WB - whole body
HI - hazard index

- ^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public (adult) of 7.5 g/day, or 1 8-oz meal per month, and for general public (child) of 2.83 g/day, or 0.4 8-oz meal per month (USEPA 2000b).
- ^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month, and for general public (child) of 77.95 g/day, or 11 8-oz meals per month (USEPA 2000b).
- ^c AFC risk based on average consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month, and for child fish consumers of 24.8 g/day, or 3 8-oz meals per month (CRITFC 1994).
- ^d HFC risk based on 99th percentile consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month, and for child fish consumers of 162 g/day, or 22 8-oz meals per month (CRITFC 1994).
- ^e Site - Waterbody: 49 - Yakima River; 56 - Klickitat River; 98 - Deschutes River; 101 - Umatilla River.

Up to eight health endpoints exceeded a value of 1.0 for rainbow trout depending on the target population and exposure parameters used for calculations. The eight endpoints were immune system, central nervous system, reproduction/development, liver, metabolism, selenosis, cardiovascular, and hyperpigmentation/keratosis in decreasing order of toxicity based on basin average hazard indices in whole body samples. Hazard indices were consistently highest at Site 98 in the Deschutes River, and generally lowest at Site 101 in the Umatilla River. Total hazard indices varied among sites by a factor of 1.2 in fillet with skin samples and by 1.9 in whole body samples.

Chemicals with Hazard Quotients At or Above 1.0

Individual chemicals with a hazard quotient at or above 1.0 in fillet with skin samples of rainbow trout collected from Site 49 and Site 98 and in whole body samples collected from Sites 49, 56, 98, and 101 were identified and are shown in Table 6.2. Hazard quotients for other individual chemicals are presented in Appendix G. A total of three

individual chemicals were identified as having hazard quotient at or above 1.0 in fillet with skin samples of rainbow trout: mercury, total Aroclors and total DDT, in decreasing order of toxicity based on the Native American child, high fish consumption rate. A total of five individual chemicals were identified with hazard quotients at or above 1.0 in whole body samples: mercury, total Aroclors, total DDT, arsenic, and zinc, in decreasing order of toxicity based on the Native American child, high fish consumption rate. Total Aroclors were comprised of Aroclor 1254 in fillet with skin samples and Aroclor 1254 and Aroclor 1260 in whole body samples, depending on the sampling site.

Table 6.2 Chemicals having hazard quotients at or above 1.0 in rainbow trout

ADULTS				CHILDREN			
TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)	TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)
	AFC	HFC			AFC	HFC	
General Public							
Fillet with skin							
Total	—	1.2-1.6	98,49 (2)	Total	—	1.5-2.0	98,49 (2)
Aroclors				Aroclors			
Mercury	—	1.4-1.7	98,49 (2)	Mercury	—	1.8-2.1	98,49 (2)
Whole body							
Total	—	1.2-1.9	56,98,49 (4)	Total	—	1.2-2.4	56,98,49 (4)
Aroclors				Aroclors			
Mercury	—	1.6-2.9	56,98 (4)	Mercury	—	2.1-3.7	56,98 (4)
Native American							
Fillet with skin							
Total	—	4.3-3.2	98,49 (2)	Total	1.3	6.3-8.4	98,49 ^b (2)
Aroclors				Aroclors			
Mercury	—	3.9-4.6	98,49 (2)	Total DDT	—	1.1	49 (2)
				Mercury	1.2-1.4	7.5-8.9	98,49 (2)
Whole body							
Total	—	2.5-5.2	56,98,101,49 (4)	Total	1.2-1.5	4.8-10	56 ^b ,98,101 ^b ,49 (4)
Aroclors				Aroclors			
Total DDT	—	1	49 (4)	Total DDT	—	2	49 (4)
Mercury	1.3	2.0-7.9	56 ^b ,98,101 ^b ,49 ^b (4)	Arsenic	—	1.8	56 (4)
				Mercury	1.3-2.4	4.0-15	56,98,101 ^b ,49 ^b (4)
				Zinc	—	1.3	98 (4)

NOTE: AFC - average fish consumption
HFC - high fish consumption

— - value less than 1.0
Bold indicates site with highest HQ

^a Site - Waterbody: 49 - Yakima River; 56 - Klickitat River; 98 - Deschutes River; 101 - Umatilla River.

^b HFC only

Cancer Risk Estimates

Cancer risks were estimated for general public and Columbia River Basin Native American adults at both 30- and 70-year exposure durations. Cancer risk estimates for detected carcinogenic chemicals at each sampling site are presented in Appendix I. Total cancer risk estimates are presented in Table 6.3 for each sampling site and for the basin average. Sampling sites were not replicated within a tributary and, therefore, tributary risk estimates were not calculated.

Table 6.3. Total cancer risks for rainbow trout

CONSUMPTION RATE/ EXPOSURE DURATION	TISSUE TYPE	TOTAL EXCESS CANCER RISK				
		SITE ^e				BASIN AVERAGE
		56	98	49	101	
General Public ^{a,b}						
AFC/30-yr	FS	na	8x10 ⁻⁶	8x10 ⁻⁶	na	8x10 ⁻⁶
	WB	7x10 ⁻⁶	1x10 ⁻⁵	1x10 ⁻⁵	6x10 ⁻⁶	1x10 ⁻⁵
HFC/30-yr	FS	na	2x10 ⁻⁴	2x10 ⁻⁴	na	2x10 ⁻⁴
	WB	1x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	1x10 ⁻⁴	2x10 ⁻⁴
AFC/70-yr	FS	na	2x10 ⁻⁵	2x10 ⁻⁵	na	2x10 ⁻⁵
	WB	2x10 ⁻⁵	3x10 ⁻⁵	3x10 ⁻⁵	1x10 ⁻⁵	2x10 ⁻⁵
HFC/70-yr	FS	na	4x10 ⁻⁴	4x10 ⁻⁴	na	4x10 ⁻⁴
	WB	3x10 ⁻⁴	5x10 ⁻⁴	5x10 ⁻⁴	3x10 ⁻⁴	4x10 ⁻⁴
Native American ^{c,d}						
AFC/30-yr	FS	na	7x10 ⁻⁵	7x10 ⁻⁵	na	7x10 ⁻⁵
	WB	6x10 ⁻⁵	1x10 ⁻⁴	1x10 ⁻⁴	5x10 ⁻⁵	8x10 ⁻⁵
HFC/30-yr	FS	na	4x10 ⁻⁴	4x10 ⁻⁴	na	4x10 ⁻⁴
	WB	3x10 ⁻⁴	6x10 ⁻⁴	6x10 ⁻⁴	3x10 ⁻⁴	5x10 ⁻⁴
AFC/70-yr	FS	na	2x10 ⁻⁴	2x10 ⁻⁴	na	2x10 ⁻⁴
	WB	1x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	1x10 ⁻⁴	2x10 ⁻⁴
HFC/70-yr	FS	na	1x10 ⁻³	1x10 ⁻³	na	1x10 ⁻³
	WB	8x10 ⁻⁴	1x10 ⁻³	1x10 ⁻³	7x10 ⁻⁴	1x10 ⁻³

NOTE: AFC - average fish consumption
HFC - high fish consumption
na - not applicable; sample type not analyzed at this site

FS - fillet with skin
WB - whole body

^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 7.5 g/day, or 1 8-oz meal per month (USEPA 2000b).

^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month (USEPA 2000b).

^c AFC risk based on average consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month (CRITFC 1994).

^d HFC risk based on 99th percentile consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month (CRITFC 1994).

^e Site - Waterbody: 56 - Klickitat River; 98 - Deschutes River; 49 - Yakima River; 101 - Umatilla River.

Carcinogenic Chemicals with Estimated Risks at or Above 10^{-5}

Cancer risk estimates vary across populations, consumption rates, and exposure levels by constant factors. Chemicals in rainbow trout with cancer risks at or above 1×10^{-5} are shown for the Columbia River Basin Native American population with average fish consumption rates at a 70-year exposure duration; total cancer risks for all chemicals are also shown (Tables 6.4.1 and 6.4.2). Multiplicative factors used to estimate risk at different exposure parameters and target populations are footnoted in the table. In addition, Appendix I shows individual risk estimates for each detected chemical for all the exposure scenarios used in this risk assessment

The three chemicals with excess cancer risks at or above 1×10^{-5} were identified for each tissue type and for each site. Seven chemicals had risk at or above 1×10^{-5} for rainbow trout fillet: adjusted Aroclors, PCB 126, PCB 118, PCB 156, DDE, 2,3,7,8-TCDD, and 1,2,3,7,8-PeCDD. In addition to these seven chemicals, arsenic and PCB 105 have risk at or above 10^{-5} in whole body samples. PCB 126 had the highest risk estimate for all sites and tissue types except whole body samples at Site 56, for which arsenic was highest.

Adjusted Aroclors had the second or third highest risk estimate for all sites and tissue types except whole body samples at Site 49. Aroclor 1254 was the only individual Aroclor detected and used in the adjusted Aroclor calculation for all sites and tissue types except for whole body samples at Site 101, for which only Aroclor 1260 was detected and used.

Table 6.4.1 Chemicals with cancer risks at or above 1×10^{-5} in Columbia River Basin Native American population at average fish consumption and 70-year exposure duration in rainbow trout, whole body

Rainbow Trout - Whole Body		Site			
Chemical		49	56	98	101
PCBs	Adjusted Aroclors	2E-05	2E-05	3E-05	2E-05
	PCB 105			1E-05	
	PCB 118	2E-05		2E-05	
	PCB 126	4E-05		8E-05	3E-05
	PCB 156	2E-05	2E-05	2E-05	
Dioxin/furans	1,2,3,7,8-PeCDD	3E-05		2E-05	2E-05
	2,3,7,8-TCDD	2E-05			
Pesticides	DDE	2E-05			
Inorganic	Arsenic		7E-05		1E-05
Total Cancer Risk for All Chemicals		2E-04	1E-04	2E-04	1E-04

Table 6.4.2 Chemicals with cancer risks at or above 1×10^{-5} in Columbia River Basin Native American population at average fish consumption and 70-year exposure duration in rainbow trout, fillet with skin

Chemical		Rainbow Trout Fillet w-skin	
		Site	
		49	98
PCBs	Adjusted Aroclors	2E-05	2E-05
	PCB 118	1E-05	2E-05
	PCB 126	3E-05	6E-05
	PCB 156	1E-05	1E-05
Dioxin/furans	1,2,3,7,8-PeCDD	3E-05	2E-05
	2,3,7,8-TCDD	2E-05	
Pesticides	DDE	1E-05	
Total Cancer Risk for All Chemicals		2E-04	2E-04

NOTE: na - not applicable; indicates that this tissue type was not measured at this site.

A blank indicates that cancer risk for this chemical was not at or above 10^{-5} for this tissue type at this site.

To estimate risk levels for general public AFC 30-year exposure, divide the cells in this table by 19.64.

To estimate risk levels for general public HFC 30-year exposure, divide the cells in this table by 1.03.

To estimate risk levels for Native American AFC 30-year exposure, divide the cells in this table by 2.34.

To estimate risk levels for Native American HFC 30-year exposure, divide the cells in this table by 0.38.

To estimate risk levels for general public AFC 70-year exposure, divide the cells in this table by 8.43.

To estimate risk levels for general public HFC 70-year exposure, divide the cells in this table by 0.44.

To estimate risk levels for Native American AFC 70-year exposure, divide the cells in this table by 0.16.
 * Site - Waterbody: 56 - Klickitat River; 98 - Deschutes River; 49 - Yakima River; 101 - Umatilla River.



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**COLUMBIA RIVER BASIN FISH
CONTAMINANT SURVEY**

**VOLUME 1
Appendix P**

**Summary of Risk Characterization Results
for Anadromous Species**

July 2002

**Prepared by
U.S. Environmental Protection Agency
Region 10
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Appendix P - Summary of Risk Characterization Results for Anadromous Species

Six anadromous fish were sampled in the Columbia River Basin: coho salmon (*Oncorhynchus kisutch*), fall chinook salmon (*Oncorhynchus tshawytscha*), spring chinook salmon (*Oncorhynchus tshawytscha*), steelhead (*Oncorhynchus mykiss*), eulachon (*Thaleichthys pacificus*), and Pacific lamprey (*Lampetra tridentata*). These fish spend a portion of their lifecycle in the ocean. Specific life history traits for each species are discussed in Appendix B.

The following sections discuss the non-cancer health effects and cancer risk estimates associated with consuming anadromous fish species for both the general public and for Columbia River Basin Native American¹ populations using the exposure assumptions presented in Section 4.0. Non-cancer health effects and cancer risks for resident species were summarized in Appendix O.

The methods used for this risk characterization were discussed in Sections 4 through 6 and a summary of the results are presented in Section 6. The risk characterization results shown for eggs in this Appendix are not discussed in Section 6, however, due to the uncertainty in egg consumption rates. A discussion of the risk characterization results for eggs are presented in Section 10.5 of the Uncertainty Evaluation.

Seventeen health endpoints were assessed for non-cancer health effects (Table 5-3). A total of 45 chemicals were used to generate the health endpoints ranging from one to 17 chemicals per health endpoint. A total hazard index for non-cancer health effects was also evaluated by summing the hazard quotients for individual chemicals. The 56 chemicals that have toxicity values for assessing cancer were evaluated by summing the cancer risk estimates for individual chemicals to determine a total cancer risk for two exposure durations for adults: 30 years and 70 years.

Exposure parameters were selected to estimate cancer risk and non-cancer hazards to two target populations referred to as the general public and Columbia River Basin Native Americans (Native Americans) (see Section 4.1). Within each target population, cancer risk and non-cancer hazards estimates were determined for adults, defined as individuals of age 18 or greater; non-cancer hazards were estimated for children, defined as up to age 15 years for the general public and up to age 6 years for Native Americans. Exposure parameters for adults and children differed for the fish consumption rate, body weight, and exposure duration (Tables 4-1 and 4-2). A summary and discussion of the non-cancer hazards and cancer risk estimates for these target populations are presented in this section by species. More detailed information on the risk characterization results are presented in the Appendices for each fish species and tissue type analyzed in this study and for several spatial scales: site, tributary (largescale sucker only), and basin:

1. All references to "Native Americans" and "tribes" in this report are only applicable to the CRITFC's member tribes: Confederated Tribes of Warm Springs, Yakama Nation, Umatilla Confederated Tribes, Nez Perce Tribe. They are collectively referred to as the CRITFC's member tribes.

- Appendix G1: Hazard quotients for individual chemicals for adults
- Appendix G2: Hazard quotients for individual chemicals for children
- Appendix H1: Percent contribution from individual chemicals to the total hazard index
- Appendix H2: Percent contribution from individual chemicals to endpoint-specific hazard indices
- Appendix I1: Estimated cancer risks for individual chemicals for adults, assuming 30 years exposure
- Appendix I2: Estimated cancer risks for individual chemicals for adults, assuming 70 years exposure
- Appendix J: Percent contribution of individual chemicals to total estimated cancer risk
- Appendix M: Comparison of the total and endpoint specific hazard indices across sites for a CRITFC's member tribal child (high fish consumption rate).
- Appendix N: Cancer risks across a range of consumption rates, by site and species

Appendix P-1 Coho Salmon

Coho salmon were collected from one site in the Columbia River Basin: 30, Umatilla River. Chemical analyses were performed on egg, fillet with skin, and whole body tissue types. The risk estimates characterized in this section are based on average chemical concentrations determined from 3 replicate composite samples collected from Site 30 (Appendix A). Because one site was sampled for coho salmon, tributary and basin risk estimates were not calculated.

Noncarcinogenic Health Effects

The potential noncarcinogenic health effects associated with the consumption of egg, fillet with skin, and whole body coho salmon were assessed by calculating hazard quotients for all detected chemicals with oral reference doses (Appendix G). The hazard quotients of chemicals with the same health endpoint were summed to calculate endpoint-specific hazard indices. In addition, the hazard quotients of all detected chemicals were summed to calculate a total hazard index for the site. Table 1.1 shows the total hazard index for each of the target populations evaluated in this risk assessment and the health endpoints which had hazard indices at or above 1.0.

Table 1.1 Total hazard indices and noncarcinogenic health endpoints with hazard indices at or above 1.0 for coho salmon. Collected from Site 30, Umatilla River

CONSUMPTION RATE/ TISSUE TYPE		HEALTH ENDPOINT	Hazard Index
General Public - Adult^{a,b}			
AFC	E	Total HI	0.2
AFC	FS	Total HI	0.3
AFC	WB	Total HI	0.3
HFC	FS	Central nervous system	2.4
		Immune system	2.6
		Reproduction/ development	2.4
		Total HI	5.7
HFC	WB	Central nervous system	2.1
		Immune system	2.9
		Reproduction/ development	2.1
		Total HI	6.2
General Public - Child^{a,b}			
AFC	E	Total HI	0.1
AFC	FS	Total HI	0.3
AFC	WB	Total HI	0.3
HFC	FS	Central nervous system	3.0
		Immune system	3.3
		Reproduction/ development	3.0
		Total HI	7.3

CONSUMPTION RATE/ TISSUE TYPE		HEALTH ENDPOINT	Hazard Index
HFC	WB	Central nervous system	2.7
		Immune system	3.7
		Reproduction/ development	2.7
		Total HI	7.9
Native American - Adult ^{c,d}			
AFC	E	Total HI	1.3
AFC	FS	Central nervous system	1.1
		Immune system	1.1
		Reproduction/ development	1.1
		Total HI	2.5
AFC	WB	Immune system	1.3
		Total HI	2.8
HFC	FS	Central nervous system	6.5
		Immune system	7.0
		Reproduction/ development	6.5
		Total HI	16
HFC	WB	Central nervous system	5.8
		Immune system	7.8
		Reproduction/ development	5.8
		Total HI	17
Native American - Child ^{c,d}			
AFC	E	Immune system	1.2
		Total HI	2.3
AFC	FS	Central nervous system	1.9
		Immune system	2.1
		Reproduction/ development	1.9
		Total HI	4.7
AFC	WB	Central nervous system	1.7
		Immune system	2.3
		Reproduction/ development	1.7
		Total HI	5.0
		Total HI	15
HFC	FS	Cardiovascular	1.9
		Central nervous system	13
		Immune system	14
		Reproduction/ development	13
		Hyperpigmentation/kerato sis	1.9
		Total HI	30
HFC	WB	Liver	1.7
		Cardiovascular	1.8

CONSUMPTION RATE/ TISSUE TYPE	HEALTH ENDPOINT	Hazard Index
	Central nervous system	11
	Immune system	15
	Metabolism	1.7
	Reproduction/ development	11
	Hyperpigmentation/kerato sis	1.8
	Total HI	33

NOTE: AFC - average fish consumption E - eggs
HFC - high fish consumption FS - fillet with skin
HI - hazard index WB - whole body

- ^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public (adult) of 7.5 g/day, or 1 8-oz meal per month, and for general public (child) of 2.83 g/day, or 0.4 8-oz meal per month (USEPA 2000).
- ^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month, and for general public (child) of 77.95 g/day, or 11 8-oz meals per month (USEPA 2000).
- ^c AFC risk based on average consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month, and for child fish consumers of 24.8 g/day, or 3 8-oz meals per month (CRITFC 1994).
- ^d HFC risk based on 99th percentile consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month, and for child fish consumers of 162 g/day, or 22 8-oz meals per month (CRITFC 1994).

Up to seven health endpoints exceeded a value of 1.0, depending on the target population and exposure parameters used for the calculations. The seven health endpoints were immune system, central nervous system, reproduction/development, cardiovascular, hyperpigmentation/keratosis, liver, and metabolism in decreasing order of toxicity based on hazard indices of whole body samples.

Chemicals With Hazard Quotients At or Above 1.0.

Individual chemicals with a hazard quotient at or greater than 1.0 in egg, fillet with skin, and whole body samples of coho salmon collected from Site 30 were identified and are shown in Table 1.2. Hazard quotients for other individual chemicals are presented in Appendix G. One chemical was identified with an hazard quotient greater than 1.0 in egg samples of coho salmon, total Aroclors. A total of three individual chemicals with hazard quotients at or above 1.0 were identified in fillet with skin samples of coho salmon: total Aroclors, mercury, and arsenic, in decreasing order of toxicity based on the Native American child, high fish consumption rate. In whole body samples, a total of four individual chemicals were identified at or above 1.0: total Aroclors, mercury, arsenic, and zinc, in decreasing order of toxicity based on the Native American child, high fish consumption rate. Total Aroclors were comprised of Aroclor 1254 in egg samples and Aroclor 1254 and Aroclor 1260 in fillet with skin and whole body samples.

Table 1.2. Chemicals having hazard quotients at or above 1.0 in coho salmon

				CHILDREN			
HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)	TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)	
AFC	HFC			AFC	HFC		
General Public							
Eggs							
Total Aroclors	—	nd	Total Aroclors	—	nd		
Fillet with skin							
Total Aroclors	—	2.6	30 (1)	Total Aroclors	—	3.3	
Mercury		2.4	30 (1)	Mercury	—	3.0	
Whole body							
Total Aroclors	—	2.9	30 (1)	Total Aroclors	—	3.7	30 (1)
Mercury	—	2.1	30 (1)	Mercury	—	2.7	30 (1)
Native American							
Eggs							
Total Aroclors	—	nd		Total Aroclors	1.2	nd	30 (1)
Fillet with skin							
Total Aroclors	1.1	7.0	30 (1)	Total Aroclors	2.1	14	30 (1)
Arsenic	—	1.0	30 (1)	Arsenic	—	1.9	30 (1)
Mercury	1.1	6.5	30 (1)	Mercury	1.9	13	30 (1)
Whole body							
Total Aroclors	1.3	7.8	30 (1)	Total Aroclors	2.3	15	30 (1)
Mercury	—	5.8	30 (1)	Arsenic	—	1.8	30 (1)
				Mercury	1.7	11	30 (1)

NOTE: AFC - average fish consumption
HFC - high fish consumption

— - value less than 1.0
Bold indicates site with highest HQ
nd - not determined

^a Site -Waterbody: 30 - Umatilla River.

Cancer Risk Estimates

Cancer risks were estimated for general public and Columbia River Basin Native American adults at both 30- and 70-year exposure durations. Cancer risk estimates for detected carcinogenic chemicals are presented in Appendix I. Total cancer risk estimates are presented in Table 1.3. Sampling sites were not replicated and, therefore, tributary and basin risk were not calculated for coho salmon.

Table 1.3. Total cancer risk for coho salmon collected at Site 30, Umatilla River

CONSUMPTION RATE/ EXPOSURE DURATION	TISSUE TYPE	TOTAL EXCESS CANCER RISK
General Public^{a,b}		
AFC/30-yr	E	7x10 ⁻⁶
	FS	8x10 ⁻⁶

CONSUMPTION RATE/ EXPOSURE DURATION	TISSUE TYPE	TOTAL EXCESS CANCER RISK
HFC/30-yr	WB	1×10^{-5}
	FS	2×10^{-4}
	WB	2×10^{-4}
AFC/70-yr	E	2×10^{-5}
	FS	2×10^{-5}
	WB	2×10^{-5}
HFC/70-yr	FS	4×10^{-4}
	WB	5×10^{-4}
Native American^{c,d}		
AFC/30-yr	E	6×10^{-5}
	FS	7×10^{-5}
	WB	9×10^{-5}
HFC/30-yr	FS	4×10^{-4}
	WB	5×10^{-4}
AFC/70-yr	E	1×10^{-4}
	FS	2×10^{-4}
	WB	2×10^{-4}
HFC/70-yr	FS	1×10^{-3}
	WB	1×10^{-3}

NOTE: AFC - average fish consumption
HFC - high fish consumption
E - eggs
FS - fillet with skin
WB - whole body

- ^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 7.5 g/day, or 1 8-oz meal per month (USEPA 2000).
- ^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month (USEPA 2000).
- ^c AFC risk based on average consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month (CRITFC 1994).
- ^d HFC risk based on 99th percentile consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month (CRITFC 1994).
- ^e Site - Waterbody: 30 - Umatilla River.

Carcinogenic Chemicals with Estimated Cancer Risks At or Above 10^{-5}

Cancer risk estimates vary across populations, consumption rates, and exposure levels by constant factors. Chemicals in coho salmon fillet with skin or whole body samples with cancer risks at or above 1×10^{-5} are shown for the Columbia River Basin Native American population with average fish consumption rates at a 70-year exposure duration; total cancer risks for all chemicals are also shown (Tables 1.4.1 and 1.4.2). Multiplicative factors used to estimate risk at

different exposure parameters and target populations are footnoted in the table. In addition, Appendix I shows individual risk estimates for each detected chemical for all the exposure scenarios used in this risk assessment.

A total of four chemicals were identified as having cancer risks at or above 1×10^{-5} for coho salmon: arsenic, adjusted Aroclors, PCB 126, and PCB 118. Arsenic had the highest risk estimate for all tissue types. Adjusted Aroclors had the second highest risk estimate for all tissue types. The individual Aroclors detected and used in the adjusted Aroclor calculation were Aroclor 1254 for egg samples, and Aroclors 1260 and 1254 for fillet with skin and whole body samples. PCB 126 had the third highest risk estimate for fillet with skin and whole body samples, but was not detected in eggs. PCB 118 had the third highest risk estimate for egg samples.

Table 1.4.1. Chemicals with cancer risks at or above 1×10^{-5} for Columbia River Basin Native American population at average fish consumption and 70-year exposure duration in coho salmon, whole body. Collected at Site 30, Umatilla River

Coho Salmon - Whole Body		
Chemical		Site
		30
PCBs	Adjusted Aroclors	5E-05
	PCB 126	5E-05
Dioxin/furans	DDE	1E-05
Inorganic	Arsenic	7E-05
Total Cancer Risk for All Chemicals		2E-04

Table 1.4.2. Chemicals with cancer risks at or above 1×10^{-5} for Columbia River Basin Native American population at average fish consumption and 70-year exposure duration in coho salmon, fillet with skin. Collected at Site 30, Umatilla River

Coho Salmon - Fillet w-skin		
Chemical		Site
		30
PCBs	Adjusted Aroclors	4E-05
	PCB 126	1E-05

Inorganic Arsenic

7E-05

Total Cancer Risk for All Chemicals

2E-04

NOTE: A blank indicates that this chemical does not have a cancer risk at or above 1×10^{-5} for this tissue type at this site

- To estimate risk levels for general public AFC 30-year exposure, divide the cells in this table by 19.64.*
- To estimate risk levels for general public HFC 30-year exposure, divide the cells in this table by 1.03.*
- To estimate risk levels for Native American AFC 30-year exposure, divide the cells in this table by 2.34.*
- To estimate risk levels for Native American HFC 30-year exposure, divide the cells in this table by 0.38.*
- To estimate risk levels for general public AFC 70-year exposure, divide the cells in this table by 8.43.*
- To estimate risk levels for general public HFC 70-year exposure, divide the cells in this table by 0.44.*
- To estimate risk levels for Native American AFC 70-year exposure, divide the cells in this table by 0.16.*

Appendix P-2 Fall Chinook Salmon

Fall chinook salmon were collected from five sites in the Columbia River Basin: 8 and 14, Columbia River; 30, Umatilla River; 48, Yakima River; and 56, Klickitat River. Chemical analyses were performed on egg, fillet with skin, and whole body tissue types. The risk estimates characterized in this section are based on average chemical concentrations determined from 3 replicate composite samples collected from each site except for egg samples at Site 8 which had 1 composite sample and fillet with skin samples at Site 8 and Site 14, which each had 4 replicate composites (Appendix A). Data are presented in two spatial scales: site and basin. Fall chinook salmon were not collected from replicate sampling sites within a tributary and, therefore, tributary risk estimates were not calculated.

Noncarcinogenic Health Effects

The potential noncarcinogenic health effects associated with the consumption of egg, fillet with skin, and whole body fall chinook salmon were assessed by calculating hazard quotients for all detected chemicals with oral reference doses (Appendix G). The hazard quotients of chemicals with the same health endpoint were summed to calculate endpoint-specific hazard indices. In addition, the hazard quotients of all detected chemicals were summed to calculate a total hazard index for the site or basin. Table 2.1 shows the total hazard index for each of the target populations evaluated in this risk assessment and the health endpoints which were at or above a hazard index of 1.0.

Table 2.1. Total hazard indices and noncarcinogenic health endpoints with hazard indices at or above 1.0 for fall chinook salmon

CONSUMPTION RATE/ TISSUE TYPE			HEALTH ENDPOINT	HAZARD INDEX					BASIN AVERAGE
				SITE ^e					
				8	14	56	30	48	
General Public - Adult ^{a,b}									
AFC	E	Total HI	0.2	na	na	na	na	0.2	
AFC	FS	Total HI	0.2	0.3	0.1	0.2	0.2	0.2	
AFC	WB	Total HI	0.2	0.3	0.2	0.3	0.3	0.3	
HFC	FS	Central nervous system	1.7	2.3	1.2	1.6	1.7	1.7	
		Immune system	1.8	2.9	–	1.2	1.5	1.8	
		Reproduction/development	1.7	2.3	1.2	1.6	1.7	1.7	
		Total HI	4.5	6.0	2.3	3.5	4.3	4.4	
HFC	WB	Central nervous system	1.7	2.0	–	1.5	1.9	1.6	
		Immune system	1.6	2.6	1.5	2.6	1.9	2.0	
		Reproduction/development	1.7	2.0	–	1.5	1.9	1.6	
		Total HI	4.7	6.1	3.6	5.4	5.1	5.0	
General Public - Child ^{a,b}									
AFC	E	Total HI	0.1	na	na	na	na	0.1	
AFC	FS	Total HI	0.2	0.3	0.1	0.2	0.2	0.2	
AFC	WB	Total HI	0.2	0.3	0.2	0.2	0.2	0.2	
		Total HI	3.9	na	na	na	na	3.9	
HFC	FS	Central nervous system	2.2	2.9	1.5	2.1	2.2	2.2	

CONSUMPTION RATE/ TISSUE TYPE			HAZARD INDEX					BASIN AVERAGE
			SITE ^e					
			8	14	56	30	48	
HFC	WB	Immune system	2.3	3.7	—	1.6	1.9	2.3
		Reproduction/development	2.2	2.9	1.5	2.1	2.2	2.2
		Total HI	5.7	7.7	3.0	4.5	5.5	5.6
		Central nervous system	2.2	2.5	1.0	1.9	2.4	2.0
		Immune system	2.0	3.3	1.9	3.4	2.4	2.6
		Reproduction/development	2.2	2.5	1.0	1.9	2.4	2.0
		Total HI	6.0	7.8	4.7	6.9	6.5	6.4
Native American - Adult ^{c,d}								
AFC	E	Total HI	1.3	na	na	na	na	1.3
AFC	FS	Central nervous system	—	1.0	—	—	—	0.8
		Immune system	—	1.3	—	—	—	0.8
		Reproduction/development	—	1.0	—	—	—	0.8
		Total HI	2.0	2.7	1.0	1.6	1.9	2.0
AFC	WB	Immune system	—	1.2	—	1.2	—	0.9
		Total HI	2.1	2.7	1.6	2.4	2.3	2.2
HFC	FS	Cardiovascular	1.8	1.4	1.7	1.0	1.5	1.5
		Central nervous system	4.7	6.2	3.2	4.4	4.7	4.6
		Immune system	4.8	8.0	—	3.4	4.1	4.8
		Reproduction/development	4.7	6.2	3.2	4.4	4.7	4.6
		Hyperpigmentation/keratosis	1.8	1.4	1.7	1.0	1.5	1.5
		Total HI	12	16	6.4	9.6	12	12
HFC	WB	Liver	—	—	—	—	1.0	0.9
		Cardiovascular	1.6	1.7	1.8	1.3	1.5	1.6
		Central nervous system	4.6	5.4	2.2	4.1	5.1	4.3
		Immune system	4.4	7.1	4.1	7.2	5.2	5.6
		Reproduction/development	4.6	5.4	2.1	4.1	5.1	4.3
		Hyperpigmentation/keratosis	1.6	1.7	1.8	1.3	1.5	1.6
		Total HI	13	17	10	15	14	14
Native American - Child ^{c,d}								
AFC	E	Total HI	2.5	na	na	na	na	2.5
AFC	FS	Central nervous system	1.4	1.8	—	1.3	1.4	1.4
		Immune system	1.4	2.4	—	1.0	1.2	1.4
		Reproduction/development	1.4	1.8	—	1.3	1.4	1.4
		Total HI	3.6	4.9	1.9	2.9	3.5	3.6
AFC	WB	Central nervous system	1.4	1.6	—	1.2	1.5	1.3
		Immune system	1.3	2.1	1.2	2.1	1.5	1.7
		Reproduction/development	1.4	1.6	—	1.2	1.5	1.3
		Total HI	3.8	4.9	3.0	4.4	4.1	4.1
HFC	FS	Liver	1.2	1.1	1.2	—	1.6	1.2
		Cardiovascular	3.6	2.7	3.3	2.0	2.9	2.9
		Central nervous system	9.1	12	6.3	8.6	9.2	9.0
		Immune system	9.4	15	1.2	6.6	8.0	9.4
		Reproduction/development	9.1	12	6.3	8.6	9.2	9.0
		Hyperpigmentation/keratosis	3.6	2.7	3.3	2.0	2.9	2.9
		Total HI	24	32	12	19	23	23
HFC	WB	Liver	1.4	1.3	1.4	1.9	2.0	1.7

CONSUMPTION RATE/ TISSUE TYPE	HEALTH ENDPOINT	HAZARD INDEX					BASIN AVERAGE
		SITE ^e					
		8	14	56	30	48	
	Cardiovascular	3.1	3.3	3.4	2.6	3.0	3.1
	Central nervous system	9.0	10	4.2	8.0	9.9	8.3
	Immune system	8.5	14	7.9	14	10	11
	Metabolism	1.2	1.0	1.1	1.1	—	1.0
	Reproduction/development	9.0	10	4.2	8.0	9.9	8.3
	Hyperpigmentation/keratosis	3.1	3.3	3.4	2.6	3.0	3.1
	Selenosis	1.1	—	1.1	1.0	1.0	1.0
	Total HI	25	32	19	28	27	27

- NOTE: AFC - average fish consumption na - not applicable; sample type not analyzed at this site E - eggs
HFC - high fish consumption — - health endpoint <1.0 at that site FS - fillet with skin
HI - hazard index WB - whole body
- ^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public (adult) of 7.5 g/day, or 1 8-oz meal per month, and for general public (child) of 2.83 g/day, or 0.4 8-oz meal per month (USEPA 2000).
- ^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month, and for general public (child) of 77.95 g/day, or 11 8-oz meals per month (USEPA 2000).
- ^c AFC risk based on average consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month, and for child fish consumers of 24.8 g/day, or 3 8-oz meals per month (CRITFC 1994).
- ^d HFC risk based on 99th percentile consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month, and for child fish consumers of 162 g/day, or 22 8-oz meals per month (CRITFC 1994).
- ^e Site - Waterbody: 8 - located in the Columbia River between the John Day Dam and the McNary Dam, 14 - located in the upper Columbia River above the Snake River; 30 - Umatilla River; 48 - Yakima River; 56 - Klickitat River.

Up to eight health endpoints had hazard indices at or above 1.0, depending on the target population and exposure parameters used for calculation. The eight health endpoints were immune system, central nervous system, reproduction/development, cardiovascular, hyperpigmentation/keratosis, liver, selenosis, and metabolism, in decreasing order of toxicity based on basin average hazard indices of whole body samples. Among specific sampling sites, total hazard indices for both fillet with skin and whole body samples were lowest at Site 56 in the Klickitat River and were generally two to three times higher at Site 14 in the Columbia River. Total hazard indices among sample sites varied by a factor of 2.6 in fillet with skin samples and by 1.7 in whole body samples.

Chemicals With Hazard Quotients At or Above 1.0

The individual chemicals with a hazard quotient at or above 1.0 in fillet with skin and whole body fall chinook samples from five sites are identified in Table 2.2. No hazard quotients were above 1.0 for eggs. The hazard quotients for all individual chemicals are presented in Appendix G. A total of three individual chemicals were identified with hazard quotients at or above 1.0 in

fillet with skin samples of fall chinook salmon: total Aroclors, mercury, and arsenic, in decreasing order of toxicity based on the Native American child, high fish consumption rate. A total of six individual chemicals were at or above 1.0 in whole body samples of fall chinook salmon: total Aroclors, mercury, arsenic, copper, selenium, and zinc, in decreasing order of toxicity based on the Native American child, high fish consumption rate. Total Aroclors were comprised of Aroclor 1254 in fillet with skin and whole body samples.

Table 2.2. Chemicals having hazard quotients at or above 1.0 in fall chinook salmon

ADULTS				CHILDREN			
TISSUE TYPE/CHEMICALS	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (TOTAL # OF SITES)	TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)
	AFC	HFC			AFC	HFC	
General Public							
Eggs	-	nd			-	nd	
Fillet with skin							
Total Aroclors	-	1.2-2.9	8,14,30,48 (5)	Total Aroclors	-	1.6-3.7	8,14,30,48 (5)
Mercury	-	1.2-2.3	8,14,56,30,48 (5)	Mercury	-	1.5-2.9	8,14,56,30,48 (5)
Whole body							
Total Aroclors	-	1.5-2.6	8,14,56,30,48 (5)	Total Aroclors	-	1.9-3.4	8,14,56,30,48 (5)
Mercury	-	1.5-2.0	8,14,30,48 (5)	Mercury	-	1.0-2.5	8,14,56,30,48 (5)
Native American							
Eggs	-	nd			-	nd	
Fillet with skin							
Total Aroclors	1.3	3.4-8.0	8 ^b ,14,30 ^b ,48 ^b (5)	Total Aroclors	1.0-2.4	1.2-16	8,14,56 ^b ,30,48 (5)
Arsenic	-	1.0-1.8	8,14,56,30,48 (5)	Arsenic	-	2.0-3.6	8,14,56,30,48 (5)
Mercury	1.0	3.2-6.2	8,14,56,30,48 (5)	Mercury	1.3-1.8	6.3-12	8,14,56 ^b ,30,48 (5)
Whole body							
Total Aroclors	1.2	4.1-7.1	8 ^b ,14,56 ^b ,30,48 ^b (5)	Total Aroclors	1.2-2.2	7.9-14	8,14,56,30,48 (5)
Arsenic	-	1.3-1.8	8,14,56,30,48 (5)	Arsenic	-	2.6-3.4	8,14,56,30,48 (5)
Mercury	-	2.1-5.4	8,14,56,30,48 (5)	Copper	-	1.7-1.8	8,14 (5)
				Mercury	1.2-1.6	4.2-10	8,14,56,30,48 (5)
				Selenium	-	1.0-1.1	8,56,30,48 (5)
				Zinc	-	1.0-1.1	8,30 (5)

NOTE: AFC - average fish consumption
HFC - high fish consumption

- - value less than 1.0
Bold indicates site with highest HQ
nd-not determined

^a Site - Waterbody: 8 - located in the Columbia River between the John Day Dam and the McNary Dam, 14 - located in the upper Columbia River above the Snake River; 30 - Umatilla River; 48 - Yakima River; 56 - Klickitat River.

^b HFC only

Cancer Risk Estimates

Cancer risks were estimated for general public and Columbia River Basin Native American adults at both 30- and 70-year exposure durations. Cancer risk estimates for detected carcinogenic chemicals at each sampling site are presented in Appendix I. Total cancer risk estimates are presented in Table 2.3 for each sampling site and for the basin average. Sampling sites were not replicated within a tributary and, therefore, tributary risk estimates were not calculated for fall chinook salmon.

Table 2.3 Total cancer risks for fall chinook salmon

CONSUMPTION RATE/ EXPOSURE DURATION	TISSUE TYPE	TOTAL EXCESS CANCER RISK					BASIN AVERAGE
		SITE ^e					
		8	14	56	30	48	
General Public^{a,b}							
AFC/30-yr	E	4x10 ⁻⁶	na	na	na	na	4x10 ⁻⁶
	FS	1x10 ⁻⁵	1x10 ⁻⁵	9x10 ⁻⁶	7x10 ⁻⁶	1x10 ⁻⁵	1x10 ⁻⁵
	WB	9x10 ⁻⁶	1x10 ⁻⁵	1x10 ⁻⁵	1x10 ⁻⁵	1x10 ⁻⁵	1x10 ⁻⁵
HFC/30-yr	FS	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	1x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴
	WB	2x10 ⁻⁴	3x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴
AFC/70-yr	E	9x10 ⁻⁶	na	na	na	na	9x10 ⁻⁶
	FS	3x10 ⁻⁵	3x10 ⁻⁵	2x10 ⁻⁵	2x10 ⁻⁵	2x10 ⁻⁵	2x10 ⁻⁵
	WB	2x10 ⁻⁵	3x10 ⁻⁵	2x10 ⁻⁵	3x10 ⁻⁵	3x10 ⁻⁵	3x10 ⁻⁵
HFC/70-yr	FS	5x10 ⁻⁴	5x10 ⁻⁴	4x10 ⁻⁴	3x10 ⁻⁴	5x10 ⁻⁴	5x10 ⁻⁴
	WB	4x10 ⁻⁴	6x10 ⁻⁴	4x10 ⁻⁴	5x10 ⁻⁴	5x10 ⁻⁴	5x10 ⁻⁴
Native American^{c,d}							
AFC/30-yr	E	3x10 ⁻⁵	na	na	na	na	3x10 ⁻⁵
	FS	1x10 ⁻⁴	1x10 ⁻⁴	8x10 ⁻⁵	6x10 ⁻⁵	9x10 ⁻⁵	9x10 ⁻⁵
	WB	8x10 ⁻⁵	1x10 ⁻⁴	8x10 ⁻⁵	1x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻⁴
HFC/30-yr	FS	6x10 ⁻⁴	6x10 ⁻⁴	5x10 ⁻⁴	4x10 ⁻⁴	5x10 ⁻⁴	5x10 ⁻⁴
	WB	5x10 ⁻⁴	7x10 ⁻⁴	5x10 ⁻⁴	6x10 ⁻⁴	6x10 ⁻⁴	6x10 ⁻⁴
AFC/70-yr	E	8x10 ⁻⁵	na	na	na	na	8x10 ⁻⁵
	FS	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	1x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴
	WB	2x10 ⁻⁴	3x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴
HFC/70-yr	FS	1x10 ⁻³	1x10 ⁻³	1x10 ⁻³	9x10 ⁻⁴	1x10 ⁻³	1x10 ⁻³
	WB	1x10 ⁻³	2x10 ⁻³	1x10 ⁻³	1x10 ⁻³	1x10 ⁻³	1x10 ⁻³

NOTE: AFC - average fish consumption
HFC - high fish consumption
na - not applicable; sample type not analyzed at this site

E - eggs
FS - fillet with skin
WB - whole body

^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 7.5 g/day, or 1 8-oz meal per month (USEPA 2000).

^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month (USEPA 2000).

^c AFC risk based on average consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month (CRITFC 1994).

^d HFC risk based on 99th percentile consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month (CRITFC 1994).

^e Site - Waterbody: 8 - located in the Columbia River between the John Day Dam and the McNary Dam, 14 - located in the upper Columbia River above the Snake River; 30 - Umatilla River; 48 - Yakima River; 56 - Klickitat River.

Chemicals with Estimated Cancer Risks At or Above 1×10^{-5}

Cancer risk estimates vary across populations, consumption rates, and exposure levels by constant factors. Chemicals in fall chinook salmon fillet with skin or whole body samples with cancer risks at or above 1×10^{-5} are shown for the Columbia River Basin Native American population with average fish consumption rates at a 70-year exposure duration; total cancer risks for all chemicals are also shown (Tables 2.4.1 and 2.4.2). Multiplicative factors used to estimate risk at different exposure parameters and target populations are footnoted in the table. In addition, Appendix I shows individual risk estimates for each detected chemical for all the exposure scenarios used in this risk assessment.

A total of five chemicals were found at risk levels at or above 1×10^{-5} for fall chinook salmon, depending on sampling site: arsenic, adjusted Aroclors, PCB 126, PCB 118, and 2,3,7,8-TCDF. Arsenic had the highest risk estimate for all sites and tissue types. Adjusted Aroclors had the second or third highest risk estimate for all sites and tissue types. Aroclor 1254 was the only individual Aroclor detected and used in the adjusted Aroclor calculation.

Table 2.4.1 Chemicals with cancer risks at or above 1×10^{-5} for Columbia River Basin Native American population at average fish consumption and 70-year exposure duration in fall chinook salmon, whole body

		Fall Chinook - Whole Body				
		Site				
	Chemical	8	14	30	48	56
PCBs	Adjusted Aroclors	3E-05	4E-05	4E-05	3E-05	3E-05
	PCB 118		2E-05	1E-05		
	PCB 126	1E-05	4E-05	3E-05	2E-05	
Dioxin/furans	2,3,7,8-TCDF		1E-05	1E-05	1E-05	
Inorganic	Arsenic	1E-04	1E-04	1E-04	1E-04	1E-04
Total Cancer Risk for All Chemicals		2E-04	3E-04	2E-04	2E-04	2E-04

Table 2.4.2 Chemicals with cancer risks at or above 1×10^{-5} for Columbia River Basin Native American population at average fish consumption and 70-year exposure duration in fall chinook salmon, fillet with skin

		Fall Chinook - Fillet w-skin				
		Site				
	Chemical	8	14	30	48	56
PCBs	Adjusted Aroclors	3E-05	5E-05	2E-05	3E-05	2E-05
	PCB 118		1E-05			
	PCB 126	2E-05	3E-05	1E-05	3E-05	
Dioxin/furans	2,3,7,8-TCDF	1E-05	1E-05			
Inorganic	Arsenic	1E-04	1E-04	8E-05	1E-04	1E-04

Total Cancer Risk for All Chemicals**2E-04****2E-04****1E-04****2E-04****2E-04**

NOTE: A blank indicates that this chemical does not have a cancer risk at or above 1×10^{-5} for this tissue type at this site

To estimate risk levels for general public AFC 30-year exposure, divide the cells in this table by 19.64.

To estimate risk levels for general public HFC 30-year exposure, divide the cells in this table by 1.03.

To estimate risk levels for Native American AFC 30-year exposure, divide the cells in this table by 2.34.

To estimate risk levels for Native American HFC 30-year exposure, divide the cells in this table by 0.38.

To estimate risk levels for general public AFC 70-year exposure, divide the cells in this table by 8.43.

To estimate risk levels for general public HFC 70-year exposure, divide the cells in this table by 0.44.

To estimate risk levels for Native American AFC 70-year exposure, divide the cells in this table by 0.16.

^a Site - Waterbody: 8 - located in the Columbia River between the John Day Dam and the McNary Dam, 14 - located in the upper Columbia River above the Snake River; 30 - Umatilla River ; 48 - Yakima River; 56 - Klickitat River.

Appendix P-3 Spring Chinook Salmon

Spring chinook salmon were collected from eight sites in the Columbia River Basin: 21, Willamette River; 30, Umatilla River; 48, Yakima River; 51, Wenatchee River; 56, Klickitat River; 62, Little White Salmon River; 63, Wind River; and 94, Grande Ronde River. Chemical analyses were performed on egg, fillet with skin, and whole body tissue types. The risk estimates characterized in this section are based on average chemical concentrations determined from 3 replicate composite samples collected from each site (Appendix A). Data are presented at two spatial scales: site and basin. Spring chinook salmon were not collected from replicate sampling sites within a tributary and, therefore, tributary risk estimates were not calculated.

Noncarcinogenic Health Effects

The potential noncarcinogenic health effects associated with the consumption of egg, fillet with skin, and whole body spring chinook salmon were assessed by calculating hazard quotients for all detected chemicals with oral reference doses (Appendix G). The hazard quotients of chemicals with the same health endpoint were summed to calculate endpoint-specific hazard indices. In addition, the hazard quotients of all detected chemicals were summed to calculate a total hazard index for the site or basin. Table 3.1 shows the total hazard index for each of the target populations evaluated in this risk assessment and the health endpoints at or above a hazard index of 1.0.

Table 3.1. Total hazard indices and noncarcinogenic health endpoints with hazard indices at or above 1.0 for spring chinook salmon

CONSUMPTION RATE/ TISSUE TYPE			HAZARD INDEX								
			SITE ^a							BASIN AVERAGE	
			21	63	62	56	94	30	48		51
HEALTH ENDPOINT											
General Public - Adult ^{a,b}											
AFC	E	Total HI	na	na	na	na	0.24	0.25	na	na	0.25
AFC	FS	Total HI	0.11	0.22	0.16	0.47	0.22	0.24	0.14	0.25	0.25
AFC	WB	Total HI	0.17	0.18	0.19	0.28	0.25	0.27	0.18	0.18	0.25
HFC	FS	Central nervous system	–	1.7	–	6.2	1.6	1.5	–	2.3	2.1
		Immune system	1.0	1.5	1.8	1.7	1.7	2.2	1.7	1.6	1.6
		Reproduction/development	–	1.7	–	6.2	1.6	1.5	–	2.3	2.1
		Total HI	2.2	4.3	3.0	8.9	4.2	4.6	2.7	4.8	4.8
HFC	WB	Central nervous system	–	–	–	1.9	1.6	1.6	–	–	1.3
		Immune system	1.6	2.0	1.8	2.0	1.7	2.0	1.8	1.8	1.8
		Reproduction/development	–	–	–	1.9	1.6	1.6	–	–	1.3
		Total HI	3.3	3.4	3.6	5.4	4.7	5.1	3.3	3.4	4.7
General Public - Child ^{a,b}											
AFC	E	Total HI	na	na	na	na	0.21	0.22	na	na	0.22
AFC	FS	Total HI	0.10	0.20	0.14	0.41	0.20	0.21	0.12	0.22	0.22
AFC	WB	Total HI	0.15	0.16	0.17	0.25	0.22	0.24	0.16	0.16	0.22
HFC	FS	Central nervous system	–	2.1	–	8.0	2.1	1.9	–	2.9	2.6
		Immune system	1.3	1.9	2.3	2.1	2.1	2.8	2.2	2.0	2.1
		Reproduction/development	–	2.1	–	8.0	2.1	1.9	–	2.9	2.6
		Total HI	2.8	5.5	3.8	11	5.4	5.9	3.4	6.1	6.1
HFC	WB	Central nervous system	–	–	–	2.5	2.0	2.1	–	–	1.7

CONSUMPTION RATE/ TISSUE TYPE			HAZARD INDEX								BASIN AVERAGE
			SITE ^a								
			21	63	62	56	94	30	48	51	
		Immune system	2.0	2.5	2.3	2.5	2.1	2.6	2.3	2.3	2.4
		Reproduction/development	—	—	—	2.5	2.0	2.1	—	—	1.7
		Total HI	4.2	4.3	4.6	6.9	6.0	6.5	4.3	4.4	6.1
Native American - Adult ^{c,d}											
AFC	E	Total HI	na	na	na	na	2.0	2.1	na	na	2.1
	FS	Central nervous system	—	—	—	2.8	—	—	—	1.0	0.92
		Reproduction/development	—	—	—	2.8	—	—	—	1.0	0.92
		Total HI	1.0	1.9	1.3	4.0	1.9	2.1	1.2	2.1	2.1
	WB	Total HI	1.5	1.5	1.6	2.4	2.1	2.3	1.5	1.5	2.1
HFC	FS	Cardiovascular	1.6	1.7	1.7	1.5	1.5	1.5	1.5	1.6	1.6
		Central nervous system	—	4.5	—	17	4.5	4.1	—	6.3	5.7
		Immune system	2.8	4.0	4.8	4.5	4.5	6.0	4.7	4.3	4.5
		Reproduction/development	—	4.5	—	17	4.5	4.1	—	6.3	5.6
		Hyperpigmentation/keratosis	1.6	1.7	1.7	1.5	1.5	1.5	1.5	1.6	1.6
		Total HI	5.9	12	8.1	24	11	13	7.3	13	13
	WB	Liver	—	—	—	1.0	—	—	1.0	1.0	0.94
		Cardiovascular	1.9	1.5	1.6	1.1	1.6	1.5	1.6	1.6	1.5
		Central nervous system	—	—	—	5.3	4.3	4.4	—	—	3.6
		Immune system	4.4	5.4	4.9	5.4	4.5	5.5	4.9	4.9	5.0
		Reproduction/development	—	—	—	5.3	4.3	4.4	—	—	3.6
		Hyperpigmentation/keratosis	1.9	1.5	1.6	1.1	1.6	1.5	1.6	1.6	1.5
		Total HI	9.1	9.3	9.9	15	13	14	9.1	9.3	13
Native American - Child ^{c,d}											
AFC	E	Liver	na	na	na	na	1.5	1.5	na	na	1.5
		Immune system	na	na	na	na	1.4	1.5	na	na	1.4
		Selenosis	na	na	na	na	1.4	1.4	na	na	1.4
		Total HI	na	na	na	na	3.6	3.9	na	na	3.8
	FS	Central nervous system	—	1.3	—	5.1	1.3	1.2	—	1.9	1.7
		Immune system	—	1.2	1.4	1.4	1.4	1.8	1.4	1.3	1.3
		Reproduction/development	—	1.3	—	5.1	1.3	1.2	—	1.9	1.7
		Total HI	1.8	3.5	2.4	7.3	3.4	3.8	2.2	3.9	3.9
	WB	Central nervous system	—	—	—	1.6	1.3	1.3	—	—	1.1
		Immune system	1.3	1.6	1.5	1.6	1.4	1.6	1.5	1.5	1.5
		Reproduction/development	—	—	—	1.6	1.3	1.3	—	—	1.1
		Total HI	2.7	2.8	2.9	4.4	3.8	4.2	2.7	2.8	3.9
HFC	FS	Liver	1.1	1.2	1.3	1.1	1.2	1.3	1.5	1.2	1.3
		Cardiovascular	3.1	3.2	3.4	2.9	3.0	2.9	2.9	3.1	3.1
		Central nervous system	—	8.8	—	33	8.7	8.0	—	12	11
		Immune system	5.4	7.7	9.4	8.8	8.8	12	9.2	8.3	8.7
		Reproduction/development	—	8.8	—	33	8.7	8.0	—	12	11
		Hyperpigmentation/keratosis	3.1	3.2	3.4	2.9	3.0	2.9	2.9	3.1	3.1
		Gastrointestinal	1.4	1.2	1.2	—	—	—	—	—	0.6
		Total HI	11	23	16	47	22	25	14	25	25
	WB	Liver	1.5	1.8	1.8	1.9	1.5	1.7	2.0	2.0	1.8
		Kidney	—	1.4	1.5	1.1	1.5	1.5	1.4	1.4	1.3
		Cardiovascular	3.6	2.8	3.1	2.1	3.1	3.0	3.2	3.2	3.0
		Central nervous system	—	—	—	10	8.3	8.6	—	—	7.0
		Immune system	8.5	10	9.5	10	8.8	11	9.5	9.5	9.8
		Metabolism	1.7	—	1.0	1.4	—	—	—	—	1.1
		Reproduction/development	—	—	—	10	8.3	8.6	—	—	6.9
		Hyperpigmentation/keratosis	3.6	2.8	3.1	2.1	3.1	3.0	3.2	3.2	3.0
		Selenosis	—	1.2	1.2	1.2	—	1.2	1.2	1.2	1.1
		Gastrointestinal	1.8	—	1.8	—	—	—	—	—	0.8

CONSUMPTION RATE/ TISSUE TYPE	HEALTH ENDPOINT	HAZARD INDEX								BASIN AVERAGE
		SITE*								
		21	63	62	56	94	30	48	51	
	Total HI	18	18	19	29	25	25	18	18	25

- NOTE: AFC - average fish consumption na - not applicable; sample type not analyzed at this site E - eggs
HFC - high fish consumption -- indicates health endpoint <1.0 at that site FS - fillet with skin
HI - hazard index WB - whole body
- ^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public (adult) of 7.5 g/day, or 1 8-oz meal per month, and for general public (child) of 2.83 g/day, or 0.4 8-oz meal per month (USEPA 2000).
- ^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month, and for general public (child) of 77.95 g/day, or 11 8-oz meals per month (USEPA 2000).
- ^c AFC risk based on average consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month, and for child fish consumers of 24.8 g/day, or 3 8-oz meals per month (CRITFC 1994).
- ^d HFC risk based on 99th percentile consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month, and for child fish consumers of 162 g/day, or 22 8-oz meals per month (CRITFC 1994).
- ^e Site - Waterbody: 21 - Willamette River; 30 - Umatilla River; 48 - Yakima River; 51 - Wenatchee River; 56 - Klickitat River; 62 - Little White Salmon River; 63 - Wind River; 94 - Grande Ronde River.

A total of ten health endpoints exceeded a hazard index of 1.0 depending on the target population and exposure parameters used for the calculation. The ten health endpoints were immune system, central nervous system, reproduction/development, cardiovascular, hyperpigmentation/keratosis, liver, kidney, metabolism, selenosis, and gastrointestinal in decreasing order of toxicity based on basin average hazard indices. Among specific sampling sites, total hazard indices for both fillet with skin and whole body samples were lowest at Site 21 in the Willamette River and 1.6 to three times higher at Site 56 in the Klickitat River.

Chemicals With Hazard Quotients At or Above 1.0

Individual chemicals with a hazard quotient at or above 1.0 in egg samples of spring chinook salmon and in fillet with skin and whole body samples of spring chinook salmon were identified and are presented in Table 3.2. Hazard quotients for other individual chemicals are presented in Appendix G. A total of two individual chemicals were identified as having hazard quotients at or above 1.0 in egg samples of spring chinook salmon: total Aroclors and selenium. A total of four individual chemicals were identified with hazard quotients above 1.0 in fillet with skin samples of spring chinook salmon: mercury, total Aroclors, arsenic, and chromium, in decreasing order of toxicity based on the Native American child, high fish consumption rate. A total of seven individual chemicals were identified with hazard quotients above 1.0 in whole body samples of spring chinook salmon: total Aroclors, mercury, arsenic, chromium, cadmium, selenium, and zinc, in decreasing order of toxicity based on the Native American child, high fish consumption rate. Total Aroclors were comprised of Aroclor 1254 in egg, fillet with skin, and whole body samples.

Table 3.2 Chemicals having hazard quotients at or above 1.0 in spring chinook salmon

ADULTS				CHILDREN			
TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)	TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)
	AFC	HFC			AFC	HFC	
General Public							
Eggs	-	nd			-	nd	
Fillet with skin							
Total	-	1.0-2.2	21,63,62,56,30,94,48,51 (8)	Total	-	1.3-2.8	21,63,62,56,30,94,48,51 (8)
Aroclors				Aroclors			
Mercury	-	1.5-6.2	63,56,30,94,51 (8)	Mercury	-	1.9-8.0	63,56,30,94,51 (8)
Whole body							
Total	-	1.6-2.0	21,63,62,56,30,94,48,51 (8)	Total	-	2.0-2.6	21,63,62,56,30,94,48,51 (8)
Aroclors				Aroclors			
Mercury	-	1.6-1.9	56,30,94 (8)	Mercury	-	2.0-2.5	56,30,94 (8)
Native American							
Eggs							
Total	-	nd		Total	1.4-1.5	nd	30,94 (2)
Aroclors				Aroclors			
Selenium	-	nd		Selenium	1.4	nd	30,94 (2)
Fillet with skin							
Total	-	2.8-6.0	21,63,62,56,30,94,48,51 (8)	Total	1.2-1.8	5.4-12	21 ^b ,63,62,56,30,94,48,51 (8)
Aroclors				Aroclors			
Arsenic	-	1.5-1.7	21,63,62,56,30,94,48,51 (8)	Arsenic	-	2.9-3.4	21,63,62,56,30,94,48,51 (8)
Mercury	1.0-2.8	4.1-17	63 ^b ,56,30 ^b ,94 ^b ,51 (8)	Chromium	-	1.2-1.4	21,63,62 (8)
Whole body				Mercury	1.2-5.1	8.0-33	63,56,30,94,51 (8)
Total Aroclors	-	4.4-5.5	21,63,62,56,30,94,48,51 (8)	Total Aroclors	1.3-1.6	8.5-11	21,63,62,56,30,94,48,51 (8)
Arsenic	-	1.1-1.9	21,63,62,56,30,94,48,51 (8)	Arsenic	-	2.1-3.6	21,63,62,56,30,94,48,51 (8)
Mercury	-	4.3-5.3	56,30,94 (8)	Cadmium	-	1.1-1.7	63,62,56,30,94,48,51 (8)
				Chromium	-	1.8	21,62 (8)
				Mercury	1.3-1.6	8.3-10	56,30,94 (8)
				Selenium	-	1.1-1.3	63,62,56,30,48,51 (8)
				Zinc	-	1.1-1.2	21,56,30 (8)

NOTE: AFC - average fish consumption
HFC - high fish consumption

- - value less than 1.0
Bold indicates site with highest HQ
nd-not determined

^a Site - Waterbody: 21 - Willamette River; 30 - Umatilla River; 48 - Yakima River; 51 - Wenatchee River; 56 - Klickitat River; 62 - Little White Salmon River; 63 - Wind River; 94 - Grande Ronde River.
^b HFC only

Cancer Risk Estimates

Cancer risks were estimated for general public and Columbia River Basin Native American adults at both 30- and 70-year exposure durations. Cancer risk estimates for detected carcinogenic chemicals at each sampling site are presented in Appendix I. Total cancer risk estimates are

presented in Table 3.3 for each sampling site and for the basin average. Sampling sites were not replicated within a tributary and, therefore, tributary risk estimates were not calculated for spring chinook salmon.

Table 3.3. Total cancer risks for spring chinook salmon

CONSUMPTION RATE/ EXPOSURE DURATION	TISSUE TYPE	TOTAL EXCESS CANCER RISK								
		SITE ^e								BASIN AVERAGE
		21	63	62	56	94	30	48	51	
General Public ^{a,b}										
AFC/30-yr	E	na	na	na	na	9x10 ⁻⁶	9x10 ⁻⁶	na	na	9x10 ⁻⁶
	FS	9x10 ⁻⁶	1x10 ⁻⁵	1x10 ⁻⁵	9x10 ⁻⁶	1x10 ⁻⁵	1x10 ⁻⁵	1x10 ⁻⁵	1x10 ⁻⁵	1x10 ⁻⁵
	WB	1x10 ⁻⁵	1x10 ⁻⁵	1x10 ⁻⁵	1x10 ⁻⁵	1x10 ⁻⁵	1x10 ⁻⁵	1x10 ⁻⁵	1x10 ⁻⁵	1x10 ⁻⁵
HFC/30-yr	FS	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴
	WB	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	3x10 ⁻⁴	3x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴
AFC/70-yr	E	na	na	na	na	2x10 ⁻⁵	2x10 ⁻⁵	na	na	2x10 ⁻⁵
	FS	2x10 ⁻⁵	3x10 ⁻⁵	3x10 ⁻⁵	2x10 ⁻⁵	3x10 ⁻⁵	3x10 ⁻⁵	3x10 ⁻⁵	3x10 ⁻⁵	3x10 ⁻⁵
	WB	3x10 ⁻⁵	3x10 ⁻⁵	3x10 ⁻⁵	3x10 ⁻⁵	3x10 ⁻⁵	3x10 ⁻⁵	3x10 ⁻⁵	3x10 ⁻⁵	3x10 ⁻⁵
HFC/70-yr	FS	4x10 ⁻⁴	5x10 ⁻⁴	6x10 ⁻⁴	4x10 ⁻⁴	5x10 ⁻⁴	6x10 ⁻⁴	5x10 ⁻⁴	5x10 ⁻⁴	5x10 ⁻⁴
	WB	6x10 ⁻⁴	5x10 ⁻⁴	5x10 ⁻⁴	5x10 ⁻⁴	5x10 ⁻⁴	6x10 ⁻⁴	6x10 ⁻⁴	6x10 ⁻⁴	6x10 ⁻⁴
Native American ^{c,d}										
AFC/30-yr	E	na	na	na	na	7x10 ⁻⁵	8x10 ⁻⁵	na	na	8x10 ⁻⁵
	FS	8x10 ⁻⁵	1x10 ⁻⁴	1x10 ⁻⁴	8x10 ⁻⁵	1x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻⁴
	WB	1x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻⁴
HFC/30-yr	FS	5x10 ⁻⁴	6x10 ⁻⁴	7x10 ⁻⁴	5x10 ⁻⁴	6x10 ⁻⁴	7x10 ⁻⁴	6x10 ⁻⁴	6x10 ⁻⁴	6x10 ⁻⁴
	WB	6x10 ⁻⁴	6x10 ⁻⁴	6x10 ⁻⁴	6x10 ⁻⁴	6x10 ⁻⁴	7x10 ⁻⁴	7x10 ⁻⁴	7x10 ⁻⁴	7x10 ⁻⁴
AFC/70-yr	E	na	na	na	na	2x10 ⁻⁴	2x10 ⁻⁴	na	na	2x10 ⁻⁴
	FS	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	3x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴
	WB	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	3x10 ⁻⁴	3x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴
HFC/70-yr	FS	1x10 ⁻³	1x10 ⁻³	2x10 ⁻³	1x10 ⁻³	1x10 ⁻³	2x10 ⁻³	1x10 ⁻³	1x10 ⁻³	1x10 ⁻³
	WB	2x10 ⁻³	1x10 ⁻³	1x10 ⁻³	1x10 ⁻³	1x10 ⁻³	2x10 ⁻³	2x10 ⁻³	2x10 ⁻³	2x10 ⁻³

NOTE: AFC - average fish consumption

HFC - high fish consumption

na - not applicable; sample type not analyzed at this site

E - eggs

FS - fillet with skin

WB - whole body

^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 7.5 g/day, or 1 8-oz meal per month (USEPA 2000).

^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month (USEPA 2000).

^c AFC risk based on average consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month (CRITFC 1994).

^d HFC risk based on 99th percentile consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month (CRITFC 1994).

^e Site - Waterbody: 21 - Willamette River; 30 - Umatilla River; 48 - Yakima River; 51 - Wenatchee River; 56 - Klickitat River; 62 - Little White Salmon River; 63 - Wind River; 94 - Grande Rhonde River.

Carcinogenic Chemicals with Estimated Cancer Risks At or Above 1 X 10⁻⁵

Cancer risk estimates vary across populations, consumption rates, and exposure levels by constant factors. Chemicals in spring chinook (fillet with skin and in whole body samples) with cancer risks at or above 1×10^{-5} are shown for the Columbia River Basin Native American population with average fish consumption rates at a 70-year exposure duration; total cancer risk for all chemicals are also shown (Tables 3.4.1 and 3.4.2). Multiplicative factors used to estimate risk at different exposure parameters and target populations are footnoted in the table. In addition, Appendix I shows individual risk estimates for each detected chemical for all the exposure scenarios used in this risk assessment.

A total of seven chemicals were identified with risks at or above 1×10^{-5} for spring chinook salmon, depending on sampling site: arsenic, adjusted Aroclors, PCB 126, PCB 118, 2,3,7,8-TCDF, 1,2,3,7,8-PeCDD, and 2,3,4,7,8-PeCDF. Arsenic had the highest risk estimate for all sites and tissue types. Adjusted Aroclors had the second or third highest risk estimate for all sites and tissue types. Aroclor 1254 was the only individual Aroclor detected and used in the adjusted Aroclor calculation.

Table 3.4.1. Chemicals with cancer risks at or above 1×10^{-5} for Columbia River Basin Native American population at average fish consumption and 70-year exposure duration in spring chinook salmon, whole body

		Spring Chinook - Whole Body							
		Site							
	Chemical	21	30	48	51	56	62	63	94
PCBs	Adjusted Aroclors	3E-05	3E-05	3E-05	3E-05	3E-05	3E-05	3E-05	3E-05
	PCB 118					1E-05			
	PCB 126	3E-05	5E-05	2E-05	3E-05	4E-05	3E-05	4E-05	2E-05
Dioxin/furans	1,2,3,7,8-PeCDD		2E-05	3E-05	1E-05	2E-05			
	2,3,4,7,8-PeCDF			1E-05	1E-05	1E-05		1E-05	1E-05
	2,3,7,8-TCDF	1E-05		1E-05	1E-05	1E-05		1E-05	1E-05
Inorganic	Arsenic	1E-04	1E-04	1E-04	1E-04	8E-05	1E-04	1E-04	1E-04
Total Cancer Risk for All Chemicals		2E-04	3E-04	3E-04	2E-04	2E-04	2E-04	2E-04	2E-04

Table 3.4.2. Chemicals with cancer risks at or above 1×10^{-5} for Columbia River Basin Native American population at average fish consumption and 70-year exposure duration in spring chinook salmon, fillet with skin

		Spring Chinook - Fillet w-skin							
		Site							
	Chemical	21	30	48	51	56	62	63	94
PCBs	Adjusted Aroclors	2E-05	4E-05	3E-05	3E-05	3E-05	3E-05	2E-05	3E-05
	PCB 126		5E-05	4E-05	4E-05		3E-05	4E-05	3E-05
	PCB 156								
Dioxin/furans	1,2,3,7,8-PeCDD		2E-05		2E-05				1E-05
	2,3,4,7,8-PeCDF			1E-05			1E-05	1E-05	1E-05
	2,3,7,8-TCDF			1E-05					
Inorganic	Arsenic	1E-04	1E-04	1E-04	1E-04	1E-04	1E-04	1E-04	1E-04
Total Cancer Risk for All Chemicals		2E-04	3E-04	2E-04	2E-04	2E-04	2E-04	2E-04	2E-04

NOTE: A blank indicates that this chemical is not at or above a cancer risk of 1×10^{-5} for this tissue type at this site

To estimate risk levels for general population AFC 30-year exposure, divide the cells in this table by 19.64.

To estimate risk levels for general population HFC 30-year exposure, divide the cells in this table by 1.03

To estimate risk levels for Native American AFC 30-year exposure, divide the cells in this table by 2.34

To estimate risk levels for Native American HFC 30-year exposure, divide the cells in this table by 0.38.

To estimate risk levels for general population AFC 70-year exposure, divide the cells in this table by 8.43

To estimate risk levels for general population HFC 70-year exposure, divide the cells in this table by 0.44.

To estimate risk levels for Native American AFC 70-year exposure, divide the cells in this table by 0.16

^a Site - Waterbody: 21 - Willamette River; 30 - Umatilla River; 48 - Yakima River; 51 - Wenatchee River; 56 - Klickitat River; 62 - Little White Salmon River; 63 - Wind River; 94 - Grande Ronde River.

Appendix P-4 Steelhead

Steelhead were collected from six sites in the Columbia River Basin: 8, Columbia River; 25, Hood River; 48, Yakima River; 56, Klickitat River; 93, Snake River; and 96, Clearwater River. Chemical analyses were performed on egg, fillet with skin, and whole body tissue types. The risk estimates characterized in this section are based on average chemical concentrations determined from 3 replicate composite samples collected from each site except at Site 8 for egg samples, which had one composite sample, and in fillet with skin and whole body samples, which had 6 replicate composite samples each (Appendix A). Data are presented in two spatial scales: site and basin. Steelhead were not collected from replicate sampling sites within a tributary and, therefore, tributary risk estimates were not calculated.

Noncarcinogenic Health Effects

The potential noncarcinogenic health effects associated with the consumption of eggs, fillet with skin, and whole body steelhead were assessed by calculating hazard quotients for all detected chemicals with oral reference doses (Appendix G). The hazard quotients of chemicals with the same health endpoint were summed to calculate endpoint-specific hazard indices. In addition, the hazard quotients of all detected chemicals were summed to calculate a total hazard index for the site or basin. Table 4.1 shows the total hazard index for each of the target populations evaluated in this risk assessment and the health endpoints that were at or above a hazard index of 1.0.

Table 4.1. Total hazard indices and noncarcinogenic health endpoints at or above 1.0 for steelhead

CONSUMPTION RATE ^a / TISSUE TYPE			HAZARD INDEX						
			SITE ^a						BASIN AVERAGE
			8	25	56	93	96	48	
General Public - Adult^{a,b}									
AFC	E	Total HI	0.3	na	na	na	na	na	0.3
AFC	FS	Total HI	0.2	0.3	0.2	0.3	0.3	0.3	0.3
AFC	WB	Total HI	0.2	0.3	0.3	0.3	0.4	0.3	0.3
HFC	FS	Central nervous system	1.4	2.8	2.4	2.9	2.6	2.5	2.4
		Immune system	1.2	1.7	1.5	1.7	1.9	2.3	2.5
		Reproduction/ development	1.4	2.8	2.4	2.9	2.6	2.5	2.5
		Total HI	3.3	5.6	4.6	5.1	5.2	5.5	5.8
HFC	WB	Central nervous system	1.0	1.8	1.7	2.0	4.1	1.8	2.1
		Immune system	1.5	1.9	2.0	2.2	2.3	2.8	2.8
		Reproduction/ development	1.0	1.8	1.7	2.0	4.1	1.8	2.1
		Total HI	3.5	5.3	5.8	5.5	7.8	5.7	6.4
General Public - Child^{a,b}									
AFC	E	Total HI	0.2	na	na	na	na	na	0.2
AFC	FS	Total HI	0.2	0.3	0.2	0.2	0.2	0.3	0.3
AFC	WB	Total HI	0.2	0.2	0.3	0.3	0.4	0.3	0.3
HFC	FS	Central nervous system	1.8	3.6	3.0	3.7	3.3	3.2	3.2

CONSUMPTION RATE ^a / TISSUE TYPE			HEALTH ENDPOINT			HAZARD INDEX						
						SITE ^e						BASIN AVERAGE
						8	25	56	93	96	48	
HFC	WB	Immune system	1.6	2.2	1.9	2.1	2.4	2.9	3.2			
		Reproduction/ development	1.8	3.6	3.0	3.7	3.3	3.2	3.2			
		Total HI	4.2	7.2	5.9	6.5	6.6	7.0	7.3			
		Central nervous system	1.3	2.3	2.1	2.5	5.3	2.3	2.7			
		Immune system	1.9	2.4	2.5	2.8	2.9	3.6	3.6			
		Reproduction/ development	1.3	2.3	2.1	2.5	5.3	2.3	2.7			
		Total HI	4.5	6.8	7.4	7.1	10	7.3	8.2			
Native American - Adult ^{c,d}												
AFC	E	Total HI	2.3	na	na	na	na	na	2.3			
AFC	FS	Central nervous system	–	1.2	1.0	1.3	1.1	1.1	1.1			
		Immune system	–	–	–	–	–	1.0	1.1			
		Reproduction/ development	–	1.2	1.0	1.3	1.1	1.1	1.1			
		Total HI	1.5	2.5	2.0	2.3	2.3	2.4	2.6			
AFC	WB	Central nervous system	–	–	–	–	1.8	–	0.9			
		Immune system	–	–	–	–	1.0	1.2	1.3			
		Reproduction/ development	–	–	–	–	1.8	–	0.9			
		Total HI	1.6	2.4	2.6	2.5	3.5	2.5	2.8			
HFC	FS	Cardiovascular	–	1.7	1.2	–	–	–	1.0			
		Central nervous system	3.9	7.6	6.4	7.8	7.1	6.8	6.8			
		Immune system	3.3	4.8	4.2	4.5	5.1	6.3	6.7			
		Reproduction/ development	3.9	7.6	6.4	7.8	7.0	6.8	6.8			
		Hyperpigmentation/kerat osis		1.7	1.2	–	–	–	1.0			
		Total HI	9.1	15	13	14	14	15	16			
HFC	WB	Liver	–	1.2	1.0	1.2	1.1	–	1.1			
		Cardiovascular	–	1.7	1.2	–	–	–	1.1			
		Central nervous system	2.8	4.9	4.6	5.4	11	4.8	5.8			
		Immune system	4.2	5.2	5.4	6.0	6.2	7.7	7.7			
		Metabolism	–	–	2.0	–	–	–	0.7			
		Reproduction/ development	2.8	4.9	4.6	5.4	11	4.8	5.7			
		Hyperpigmentation/kerat osis	–	1.7	1.2	–	–	–	1.1			
		Total HI	9.6	15	16	15	21	16	17			
Native American - Child ^{c,d}												
AFC	E	Liver	1.5	na	na	na	na	na	1.5			
		Immune system	1.2	na	na	na	na	na	1.2			
		Selenosis	1.5	na	na	na	na	na	1.5			
		Total HI	4.3	na	na	na	na	na	4.3			
AFC	FS	Central nervous system	1.2	2.3	1.9	2.3	2.1	2.0	2.0			
		Immune system	–	1.4	1.2	1.4	1.5	1.9	2.0			
		Reproduction/ development	1.2	2.3	1.9	2.3	2.1	2.0	2.0			
		Total HI	2.7	4.6	3.7	4.2	4.2	4.5	4.7			
AFC	WB	Central nervous system	–	1.5	1.4	1.6	3.4	1.4	1.7			

NOTE: AFC - average fish consumption na - not applicable; sample type not
HFC - high fish consumption analyzed at this site E - eggs
HI - hazard index -- health endpoint <1.0 at that site FS - fillet with skin
WB - whole body

^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public (adult) of 7.5 g/day, or 1 8-oz meal per month, and for general public (child) of 2.83 g/day, or 0.4 8-oz meal per month (USEPA 2000).

^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month, and for general public (child) of 77.95 g/day, or 11 8-oz meals per month (USEPA 2000).

^c AFC risk based on average consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month, and for child fish consumers of 24.8 g/day, or 3 8-oz meals per month (CRITFC 1994).

^d HFC risk based on 99th percentile consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month, and for child fish consumers of 162 g/day, or 22 8-oz meals per month (CRITFC 1994).

^e Site - Waterbody: 8 - located in the Columbia River between the John Day Dam and the McNary Dam; 25 - Hood River; 48 - Yakima River; 56 - Klickitat River; 93 - Snake River; 96 - Clearwater River.

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both fillet with skin and whole body samples were lowest at Site 8 in the Columbia River and were generally two times higher in fillet with skin samples at Site 25 and in whole body samples at Site 96. Total hazard index risk estimates among sample sites varied by a factor of 1.7 in fillet with skin samples and 2.2 in whole body samples (Table 6-47).

Chemicals With Hazard Quotients At or Above 1.0

Individual chemicals with a hazard quotient at or above 1.0 in egg samples of steelhead in fillet with skin and whole body samples of steelhead were identified and are presented in Table 4.2. Hazard quotients for other individual chemicals are presented in Appendix G. A total of two individual chemicals had hazard quotients above 1.0 in egg samples of steelhead, selenium and total Aroclors, based on the Native American child, average fish consumption rate. A total of three individual chemicals had hazard quotients greater than 1.0 in fillet with skin samples of steelhead: mercury, total Aroclors, and arsenic, in decreasing order of toxicity based on the Native American child, high fish consumption rate. A total of seven individual chemicals were identified with hazard quotients above 1.0 in whole body samples of steelhead: mercury, total Aroclors, arsenic, nickel, selenium, copper, and total DDT, in decreasing order of toxicity based on the Native American child, high fish consumption rate. Total Aroclors were comprised of Aroclor 1254 in egg samples and Aroclor 1254 and 1260 in fillet with skin and whole body samples.

Table 4.2. Chemicals having hazard quotients at or above 1.0 in steelhead

ADULTS				CHILDREN			
TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)	TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)
	AFC	HFC			AFC	HFC	
General Public							
Eggs	-	nd			-	nd	
Fillet with skin							
Total Aroclors	-	1.2-2.3	8,25,56,93,96,48 (6)	Total Aroclors	-	1.6-2.9	8,25,56,93,96,48 (6)
Mercury	-	1.4-2.9	8,25,56,93,96,48 (6)	Mercury	-	1.8-3.7	8,25,56,93,96,48 (6)
Whole body							
Total Aroclors	-	1.5-2.8	8,25,56,93,96,48 (6)	Total Aroclors	-	1.9-3.6	8,25,56,93,96,48 (6)
Mercury	-	1.0-4.1	8,25,56,93,96,48 (6)	Mercury	-	1.3-5.3	8,25,56,93,96,48 (6)
Native American							
Eggs							
Total Aroclors	-	nd	8 (1)	Total Aroclors	1.2	nd	8 (1)
Selenium	-	nd	8 (1)	Selenium	1.5	nd	8 (1)
Fillet with skin							
Total Aroclors	1.0	3.3-6.3	8 ^b ,25 ^b ,56 ^b ,93 ^b ,96 ^b ,48 (6)	Total Aroclors	1.2-1.9	6.5-12	8 ^b ,25,56,93,96,48 (6)
Arsenic	-	1.2-1.7	25,56 (6)	Arsenic	-	1.3-3.4	8,25,56,93,96,48 (6)
Mercury	1.0-1.3	3.9-7.8	8 ^b , 25,56,93,96,48 (6)	Mercury	1.2-2.3	7.6-15	8,25,56,93,96,48 (6)
Whole body							
Total Aroclors	1.0-1.2	4.2-7.7	8 ^b ,25 ^b ,56 ^b ,93,96,48	Total Aroclors	1.2-2.3	8.1-15	8,25,56,93,96,48

ADULTS				CHILDREN			
TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)	TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)
	AFC	HFC			AFC	HFC	
Arsenic	—	1.2-1.7	(6) 25,56 (6)	Total DDT	—	1	(6) 93 (6)
Mercury	1.8	2.8-11	8 ^b ,25 ^b ,56 ^b ,93 ^b , 96 , 48 ^b (6)	Arsenic	—	1.2-3.2	8, 25 ,56,93,96,48 (6)
Nickel	—	1.6	56 (6)	Nickel	—	3.2	56 (6)
				Copper	—	1.6	56 (6)
				Mercury	1.4-3.4	5.4-22	8 ^b ,25,56,93, 96 ,48 (6)
				Selenium	—	1.0-1.9	8, 25 ,56,93,96,48 (6)

NOTE: AFC - average fish consumption
HFC - high fish consumption

— - value less than 1.0
Bold indicates site with highest HQ
nd - not determined

^a Site - Waterbody: 8 - located in the Columbia River between the John Day Dam and the McNary Dam; 25 - Hood River; 48 - Yakima River; 56 - Klickitat River; 93 - Snake River; 96 - Clearwater River.

^b HFC only

Cancer Risk Estimates

Cancer risks were estimated for general public and Columbia River Basin Native American adults at both 30- and 70-year exposure durations. Cancer risk estimates for detected carcinogenic chemicals at each sampling site are presented in Appendix I. Total cancer risk estimates are presented in Table 4.3 for each sampling site and for the basin average. Sampling sites were not replicated within a tributary and, therefore, tributary risk estimates were not calculated for fall chinook salmon.

Table 4.3. Total cancer risks for steelhead

		TOTAL EXCESS CANCER RISK						
CONSUMPTION RATE/ EXPOSURE DURATION	TISSUE TYPE	SITE ^e						BASIN AVERAGE
		8	25	56	93	96	48	
General Public ^{a,b}								
AFC/30-yr	E	4x10 ⁻⁶	na	na	na	na	na	4x10 ⁻⁶
	FS	6x10 ⁻⁶	1x10 ⁻⁵	1x10 ⁻⁵	1x10 ⁻⁵	1x10 ⁻⁵	9x10 ⁻⁶	1x10 ⁻⁵
	WB	8x10 ⁻⁶	1x10 ⁻⁵	1x10 ⁻⁵	1x10 ⁻⁵	2x10 ⁻⁵	1x10 ⁻⁵	1x10 ⁻⁵
HFC/30-yr	FS	1x10 ⁻⁴	3x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	3x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴
	WB	1x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	3x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴
AFC/70-yr	E	9x10 ⁻⁶	na	na	na	na	na	9x10 ⁻⁶
	FS	1x10 ⁻⁵	3x10 ⁻⁵	3x10 ⁻⁵	2x10 ⁻⁵	3x10 ⁻⁵	2x10 ⁻⁵	3x10 ⁻⁵
	WB	2x10 ⁻⁵	3x10 ⁻⁵	3x10 ⁻⁵	3x10 ⁻⁵	4x10 ⁻⁵	2x10 ⁻⁵	3x10 ⁻⁵
HFC/70-yr	FS	3x10 ⁻⁴	6x10 ⁻⁴	5x10 ⁻⁴	4x10 ⁻⁴	6x10 ⁻⁴	4x10 ⁻⁴	5x10 ⁻⁴
	WB	3x10 ⁻⁴	5x10 ⁻⁴	5x10 ⁻⁴	6x10 ⁻⁴	7x10 ⁻⁴	4x10 ⁻⁴	6x10 ⁻⁴
Native American ^{c,d}								
AFC/30-yr	E	3x10 ⁻⁵	na	na	na	na	na	3x10 ⁻⁵
	FS	5x10 ⁻⁵	1x10 ⁻⁴	1x10 ⁻⁴	8x10 ⁻⁵	1x10 ⁻⁴	8x10 ⁻⁵	1x10 ⁻⁴
	WB	7x10 ⁻⁵	1x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻⁴	8x10 ⁻⁵	1x10 ⁻⁴
HFC/30-yr	FS	3x10 ⁻⁴	7x10 ⁻⁴	6x10 ⁻⁴	5x10 ⁻⁴	7x10 ⁻⁴	5x10 ⁻⁴	6x10 ⁻⁴
	WB	4x10 ⁻⁴	6x10 ⁻⁴	6x10 ⁻⁴	7x10 ⁻⁴	8x10 ⁻⁴	5x10 ⁻⁴	7x10 ⁻⁴

CONSUMPTION RATE/ EXPOSURE DURATION	TISSUE TYPE	TOTAL EXCESS CANCER RISK						BASIN AVERAGE
		SITE ^e						
		8	25	56	93	96	48	
AFC/70-yr	E	8x10 ⁻⁵	na	na	na	na	na	8x10 ⁻⁵
	FS	1x10 ⁻⁴	3x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	3x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴
	WB	2x10 ⁻⁴	2x10 ⁻⁴	2x10 ⁻⁴	3x10 ⁻⁴	3x10 ⁻⁴	2x10 ⁻⁴	3x10 ⁻⁴
HFC/70-yr	FS	7x10 ⁻⁴	2x10 ⁻³	1x10 ⁻³	1x10 ⁻³	2x10 ⁻³	1x10 ⁻³	1x10 ⁻³
	WB	9x10 ⁻⁴	1x10 ⁻³	1x10 ⁻³	2x10 ⁻³	2x10 ⁻³	1x10 ⁻³	2x10 ⁻³

NOTE: AFC - average fish consumption
HFC - high fish consumption
na - not applicable; sample type not analyzed at this site

E - eggs
FS - fillet with skin
WB - whole body

- ^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 7.5 g/day, or 1 8-oz meal per month (USEPA 2000).
- ^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month (USEPA 2000).
- ^c AFC risk based on average consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month (CRITFC 1994).
- ^d HFC risk based on 99th percentile consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month (CRITFC 1994).
- ^e Site - Waterbody: 8 - located in the Columbia River between the John Day Dam and the McNary Dam; 25 - Hood River; 48 - Yakima River; 56 - Klickitat River; 93 - Snake River; 96 - Clearwater River.

Carcinogenic Chemicals with Estimated Risks At or Above 10⁻⁵

Cancer risk estimates vary across populations, consumption rates, and exposure levels by constant factors. Chemicals in steelhead (fillet with skin and in whole body samples) with cancer risks at or above 1 x 10⁻⁵ are shown for the Columbia River Basin Native American population with average fish consumption rates at a 70-year exposure duration; total cancer risks for all chemicals are also shown (Tables 4.4.1 and 4.4.2). Multiplicative factors used to estimate risk at different exposure parameters and target populations are footnoted in the table. In addition, Appendix I shows individual risk estimates for each detected chemical for all the exposure scenarios used in this risk assessment.

A total of four chemicals were at or above 1 x 10⁻⁵ for steelhead, depending on sampling site: arsenic, adjusted Aroclors, PCB 126, and PCB 118. In fillet with skin samples, arsenic was the highest at most sites, except for Site 93 and Site 96 where PCB 126 had the highest risk estimates. Adjusted Aroclors was the second or third highest risk estimate for fillet with skin samples at all sites. In whole body samples, arsenic had the highest risk estimate at Sites 8, 56, and 25; PCB 126 had the highest risk estimate at Site 93 and Site 96; adjusted Aroclors had the highest risk estimate at Site 48. Aroclor 1254 was detected and used in the adjusted Aroclor calculation for all sites and tissue types. Aroclor 1260 was also detected and used at Site 25 and Site 48 for fillet with skin and whole body samples.

Table 5.4.1. Chemicals with cancer risks at or above 1×10^{-5} for Columbia River Basin Native American population at average fish consumption and 70-year exposure duration in steelhead, whole body

		Steelhead Wholebody					
		Site					
	Chemical	8	25	48	56	93	96
PCBs	Adjusted Aroclors	3E-05	3E-05	5E-05	3E-05	4E-05	4E-05
	PCB 118						1E-05
	PCB 126	4E-05	3E-05	4E-05	5E-05	8E-05	9E-05
Dioxin/furans	1,2,3,7,8-PeCDD						3E-05
	2,3,4,7,8-PeCDF		2E-05	1E-05	1E-05	2E-05	2E-05
Inorganic	Arsenic	7E-05	1E-04	4E-05	9E-05	6E-05	7E-05
Total Cancer Risk for All Chemicals		2E-04	2E-04	2E-04	2E-04	3E-04	3E-04

Table 4.4.2. Chemicals with cancer risks at or greater 1×10^{-5} for Columbia River Basin Native American population at average fish consumption and 70-year exposure duration in steelhead, fillet with skin

		Steelhead Fillet w/skin					
		Site					
	Chemical	8	25	48	56	93	96
PCBs	Adjusted Aroclors	2E-05	3E-05	4E-05	3E-05	3E-05	3E-05
	PCB 118						1E-05
	PCB 126		5E-05	4E-05	6E-05	6E-05	8E-05
Dioxin/furans	1,2,3,7,8-PeCDD		1E-05				1E-05
	2,3,4,7,8-PeCDF					1E-05	2E-05
Inorganic	Arsenic	6E-05	1E-04	5E-05	9E-05	5E-05	6E-05
Total Cancer Risk for All Chemicals		1E-04	3E-04	2E-04	2E-04	2E-04	3E-04

NOTE: A blank indicates that this chemical does not have a cancer risk at or above 1×10^{-5} for this tissue type at this site

To estimate risk levels for general population AFC 30-year exposure, divide the cells in this table by 19.64.

To estimate risk levels for general population HFC 30-year exposure, divide the cells in this table by 1.03.

To estimate risk levels for Native American AFC 30-year exposure, divide the cells in this table by 2.34.

To estimate risk levels for Native American HFC 30-year exposure, divide the cells in this table by 0.38

To estimate risk levels for general population AFC 70-year exposure, divide the cells in this table by 8.43

To estimate risk levels for general population HFC 70-year exposure, divide the cells in this table by 0.44

To estimate risk levels for Native American AFC 70-year exposure, divide the cells in this table by 0.16

^a Site - Waterbody: 8 - located in the Columbia River between the John Day Dam and the McNary Dam;
25 - Hood River; 48 - Yakima River; 56 - Klickitat River; 93 - Snake River; 96 - Clearwater River.

Appendix P-5 Eulachon

Eulachon were collected from one site in the Columbia River Basin: 3, located in the Columbia River. Chemical analyses were performed on whole body tissue. The risk estimates characterized in this section are based on average chemical concentrations determined from the three replicate composite samples collected from Site 48. One site was sampled for eulachon and, therefore, tributary and basin risk averages were not calculated.

Noncarcinogenic Health Effects

The potential noncarcinogenic health effects associated with the consumption of whole body eulachon were assessed by calculating hazard quotients for all detected chemicals with oral reference doses (Appendix G). The hazard quotients of chemicals with the same health endpoint were summed to calculate endpoint-specific hazard indices. In addition, the hazard quotients of all detected chemicals were summed to calculate a total hazard index for the site. Table P-5.1 shows the total hazard index for each of the populations evaluated in this risk assessment and the health endpoints that had hazard indices at or above of 1.0.

Table 5.1. Total hazard indices and noncarcinogenic health endpoints with hazard indices at or above 1.0 for eulachon collected from Site 3, Columbia River

CONSUMPTION RATE ^a / TISSUE TYPE		HEALTH ENDPOINT	HAZARD INDEX
General Public - Adult^{a,b}			
AFC	WB	Total HI	0.1
HFC	WB	Total HI	1.6
General Public - Child^{a,b}			
AFC	WB	Total HI	0.1
HFC	WB	Total HI	2.1
Native American - Adult^{c,d}			

CONSUMPTION RATE ^{a/}		HEALTH ENDPOINT	HAZARD INDEX
TISSUE TYPE			
AFC	WB	Total HI	0.4
HFC	WB	Cardiovascular	1.7
		Hyperpigmentation/keratosis	1.7
		Total HI	4.4
Native American - Child ^{c,d}			
AFC	WB	Total HI	1.3
HFC	WB	Cardiovascular	3.2
		Hyperpigmentation/keratosis	3.2
		Total HI	8.6

NOTE: AFC - average fish consumption HI - hazard index
HFC - high fish consumption WB - whole body

^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public (adult) of 7.5 g/day, or 1 8-oz meal per month, and for general public (child) of 2.83 g/day, or 0.4 8-oz meal per month (USEPA 2000).

^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month, and for general public (child) of 77.95 g/day, or 11 8-oz meals per month (USEPA 2000).

^c AFC risk based on average consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month, and for child fish consumers of 24.8 g/day, or 3 8-oz meals per month (CRITFC 1994).

^d HFC risk based on 99th percentile consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month, and for child fish consumers of 162 g/day, or 22 8-oz meals per month (CRITFC 1994).

Up to two health endpoints exceeded a hazard index of 1.0, depending on the target population and exposure parameters used for calculation. The two endpoints were cardiovascular and hyperpigmentation/keratosis.

Chemicals With Hazard Quotients At or Above 1.0.

Individual chemicals with a hazard quotient greater than 1.0 in whole body samples of eulachon at Site 3 were identified and are presented in Table 5.2. Hazard quotients for all individual chemicals are presented in Appendix G. One chemical, arsenic, had a hazard quotient above 1.0 in whole body samples of eulachon at the Native American adult and child, high fish consumption rates.

Table 5.2. Chemicals having hazard quotients at or greater than 1.0 in eulachon

ADULTS				CHILDREN			
TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)	TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)
	AFC	HFC			AFC	HFC	
Native American							
Whole body							
Arsenic	–	1.7	3 (1)	Arsenic	–	3.2	3 (1)

NOTE: AFC - average fish consumption

HFC - high fish consumption
-- value less than 1.0

^a Site - Waterbody: 3 - Columbia River.

Cancer Risk Estimates

Cancer risks were estimated for general public and Columbia River Basin Native American adults at both 30- and 70-year exposure durations. Cancer risk estimates for detected carcinogenic chemicals are presented in Appendix I. Total cancer risk estimates are presented in Table 5.3. One site was sampled for eulachon and, therefore, tributary and basin risk were not calculated.

Table 5.3. Total cancer risks for eulachon collected at Site 3, Columbia River

CONSUMPTION RATE/ EXPOSURE DURATION	TISSUE TYPE	TOTAL EXCESS CANCER RISK
General Public^{a,b}		
AFC/30-yr	WB	1×10^{-5}
HFC/30-yr	WB	2×10^{-4}
AFC/70-yr	WB	2×10^{-5}
HFC/70-yr	WB	5×10^{-4}
Native American^{c,d}		
AFC/30-yr	WB	9×10^{-5}
HFC/30-yr	WB	6×10^{-4}
AFC/70-yr	WB	2×10^{-4}
HFC/70-yr	WB	1×10^{-3}

NOTE: AFC - average fish consumption
HFC - high fish consumption

WB - whole body

- ^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 7.5 g/day, or 1 8-oz meal per month (USEPA 2000).
- ^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month (USEPA 2000).
- ^c AFC risk based on average consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month (CRITFC 1994).
- ^d HFC risk based on 99th percentile consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month (CRITFC 1994).

Carcinogenic Chemicals with Estimated Risks At or Above 10^{-5}

Cancer risk estimates vary across populations, consumption rates, and exposure levels by constant factors. Chemicals in eulachon whole body samples with cancer risks at or above 1×10^{-5} are shown for the Columbia River Basin Native American population with average fish consumption rates at a 70-year exposure duration; total cancer risk for all chemicals are also shown (Table 5.4). Multiplicative factors used to estimate risks at different exposure parameters and target populations are footnoted in the table. In addition, Appendix I shows individual risk estimates for each detected chemical for all the exposure scenarios used in this risk assessment.

Only three chemicals had cancer risks above 1×10^{-5} for eulachon: arsenic, 2,3,7,8-TCDD, and 1,2,3,7,8-PeCDD.

Table 5.4. Chemicals with cancer risks at or above 1×10^{-5} for Columbia River Basin Native American population at average fish consumption and 70-year exposure duration in eulachon, whole body collected at Site 3, Columbia River

		Eulachon - Whole Body
		Site
		3
Dioxin/furans	Chemical	
	1,2,3,7,8-PeCDD	3E-05
	2,3,7,8-TCDD	1E-05
Inorganic	Arsenic	1E-04
Total Cancer Risk for All Chemicals		2E-04

NOTE: A blank indicates that this chemical does not have a cancer risk at or above 1×10^{-5} for this tissue type at this site.

To estimate risk levels for general population AFC 30-year exposure, divide the cells in this table by 19.64.

To estimate risk levels for general population HFC 30-year exposure, divide the cells in this table by 1.03.

To estimate risk levels for Native American AFC 30-year exposure, divide the cells in this table by 2.34.

To estimate risk levels for Native American HFC 30-year exposure, divide the cells in this table by 0.38.

To estimate risk levels for general population AFC 70-year exposure, divide the cells in this table by 8.43.

To estimate risk levels for general population HFC 70-year exposure, divide the cells in this table by 0.44.

To estimate risk levels for Native American AFC 70-year exposure, divide the cells in this table by 0.16.

Appendix P-6 Pacific Lamprey

Pacific lamprey were collected from two sites in the Columbia River Basin: 21, Willamette River and 24, Fifteen Mile Creek. Chemical analyses were performed on fillet with skin and whole body samples of fish collected from Site 21 and on whole body samples of fish collected from Site 24. The risk estimates characterized in this section are based on average chemical concentrations determined from 3 replicate composite samples collected from each site except for whole body samples at Site 21, which had 6 replicate composite samples (Appendix A). Data are presented at two spatial scales: site and basin. Pacific lamprey were not collected from replicate sampling sites within a tributary and, therefore, tributary risk estimates were not calculated.

Noncarcinogenic Health Effects

The potential noncarcinogenic health effects associated with the consumption of fillet with skin and whole body Pacific lamprey were assessed by calculating hazard quotients for all detected chemicals with a oral reference dose (Appendix G). The hazard quotients with the same health endpoint were summed to calculate endpoint-specific hazard indices. In addition, the hazard quotients of all detected chemicals were summed to calculate a total hazard index for the site or basin. Table 6.1 shows the total hazard index for each of the target populations evaluated in this risk assessment and the health endpoints which exceeded a value of 1.0.

Table 6.1. Total hazard indices and noncarcinogenic health endpoints at or above 1.0 for Pacific lamprey

CONSUMPTION RATE ^a / TISSUE TYPE			HAZARD INDEX		
			SITE ^e		BASIN AVERAGE ^f
			21	24	
General Public - Adult^{a,b}					
AFC	FS	Total HI	0.5	na	0.5
AFC	WB	Total HI	0.6	1.0	0.8
HFC	FS	Immune system	8.8	na	8.8
		Total HI	10	na	10
HFC	WB	Central nervous system	1.8	3.6	2.4
		Immune system	8.7	13	10
		Reproduction /development	1.8	3.6	2.4
		Total HI	12	19	14
General Public - Child^{a,b}					
AFC	FS	Total HI	0.5	na	0.5
AFC	WB	Total HI	0.6	0.9	0.7
HFC	FS	Immune system	11	na	11
		Total HI	13	na	13
HFC	WB	Liver	–	1.2	1.0
		Central nervous system	2.2	4.6	3.0
		Immune system	11	17	13
		Reproduction /development	2.2	4.6	3.0
		Total HI	15	24	19
Native American - Adult^{c,d}					

CONSUMPTION RATE ^a / TISSUE TYPE			HAZARD INDEX		
			SITE ^e		BASIN AVERAGE ^f
			21	24	
AFC	FS	Immune system	3.9	na	3.9
		Total HI	4.5	na	4.5
AFC	WB	Central nervous system	–	1.6	1.0
		Immune system	3.8	5.9	4.7
		Reproduction /development	–	1.6	1.0
		Total HI	5.3	8.2	6.4
HFC	FS	Liver	2.0	na	2.0
		Immune system	24	na	24
		Total HI	28	na	28
HFC	WB	Liver	1.7	2.6	2.0
		Central nervous system	4.8	9.8	6.5
		Immune system	24	36	29
		Reproduction /development	4.8	9.8	6.4
		Total HI	33	51	40
Native American - Child ^{c,d}					
AFC	FS	Immune system	7.2	na	7.2
		Total HI	8.2	na	8.2
AFC	WB	Central nervous system	1.4	2.9	1.9
		Immune system	7.0	11	8.5
		Reproduction /development	1.4	2.9	1.9
		Total HI	9.8	15	12
HFC	FS	Liver	4.0	na	4.0
		Cardiovascular	1.1	na	1.1
		Immune system	47	na	47
		Hyperpigmentation/keratosis	1.1	na	1.1
		Total HI	54	na	54
HFC	WB	Liver	3.3	5.1	4.0
		Kidney	1.5	–	1.2
		Cardiovascular	1.1	–	0.9
		Central nervous system	9.3	19	12
		Immune system	46	70	56
		Reproduction /development	9.3	19	12
		Hyperpigmentation/keratosis	1.1	–	0.9
		Selenosis	1.3	1.2	1.2
		Total HI	64	99	77

NOTE: AFC - average fish consumption na - not applicable; sample type not analyzed at this site FS - fillet with skin
HFC - high fish consumption -- indicates health endpoint <1.0 at that site WB - whole body
HI - hazard index

^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public (adult) of 7.5 g/day, or 1 8-oz meal per month, and for general public (child) of 2.83 g/day, or 0.4 8-oz meal per month (USEPA 2000).

^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month, and for general public (child) of 77.95 g/day, or 11 8-oz meals per month (USEPA 2000).

^c AFC risk based on average consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month, and for child fish consumers of 24.8 g/day, or 3 8-oz meals per month (CRITFC 1994).

- ^d HFC risk based on 99th percentile consumption rate for adult fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month, and for child fish consumers of 162 g/day, or 22 8-oz meals per month (CRITFC 1994).
- ^e Site - Waterbody: 21 - Willamette River ; 24 - Fifteen Mile Creek
- ^f Basin average hazard indices equals Site 21 hazard indices for FS samples.

Up to eight health endpoints exceeded a hazard index of 1.0 depending on the target population and exposure parameters used for calculation. The eight health endpoints were immune system, central nervous system, reproduction/development, liver, kidney, selenosis, cardiovascular, and hyperpigmentation/keratosis in decreasing order of toxicity based on basin average hazard indices of whole body samples.

Chemicals With Hazard Quotients At or Above 1.0

Individual chemicals with a hazard quotient at or above 1.0 in fillet with skin samples of Pacific lamprey at Site 21 and in whole body samples at Sites 21 and 24 are shown in Table 6.2. Hazard quotients for all chemicals are presented in Appendix G. A total of three individual chemicals had hazard quotients above 1.0 in fillet with skin samples of Pacific lamprey: total Aroclors, total DDT, and arsenic, in decreasing order of toxicity based on the Native American child, high fish consumption rate. A total of eight individual chemicals had hazard quotients at or above 1.0 in whole body samples of Pacific lamprey: total Aroclors, mercury, total DDT, copper, cadmium, selenium, chlordane (total), and arsenic, in decreasing order of toxicity based on the Native American child, high fish consumption rate. Total Aroclors were comprised of Aroclor 1254 in fillet with skin samples and Aroclor 1254 and Aroclor 1260 in whole body samples.

Table 6.2. Chemicals having hazard quotients at or above 1.0 in Pacific lamprey

ADULTS				CHILDREN			
TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES WITH VALUES >1 (total # of sites)	TISSUE TYPE/ CHEMICAL	HAZARD QUOTIENT		SITES ^a WITH VALUES >1 (total # of sites)
	AFC	HFC			AFC	HFC	
General Public							
Fillet with skin							
Total Aroclors	—	8.8	21 (1)	Total Aroclors	—	11	21 (1)
Whole body							
Total Aroclors	—	8.7-13	21,24 (2)	Total Aroclors	—	11-17	21,24 (2)
Mercury	—	1.8-3.6	21,24 (2)	Mercury	—	2.2-4.6	21,24 (2)
Native American							
Fillet with skin							
Total Aroclors	3.9	24	21 (1)	Total Aroclors	7.2	47	21 (1)
Total DDT	—	1.0	21 (1)	Total DDT	—	2.0	21 (1)
				Arsenic	—	1.1	21 (1)
Whole body							
Total Aroclors	3.8-5.9	24-36	21,24 (2)	Total Aroclors	7.0-11	46-70	21,24 (2)
Total DDT	—	1.4	24 (2)	Chlordane (total)	—	1.2	24 (2)
Mercury	1.6	4.8-9.8	21 ^b ,24 (2)	Total DDT	—	1.5-2.6	21,24 (2)
				Arsenic	—	1.1	21 (2)

Cadmium	–	1.5	21 (2)
Copper	–	1.3-1.5	21, 24 (2)
Mercury	1.4-2.9	9.3-19	21, 24 (2)
Selenium	–	1.2-1.3	21, 24 (2)

NOTE: AFC - average fish consumption
HFC - high fish consumption

– - value less than 1.0

Bold indicates site with highest HQ

^a Site - Waterbody: 21 - Willamette River ; 24 - Fifteen Mile Creek

^b HFC only

Cancer Risk Estimates

Cancer risks were estimated for general public and Columbia River Basin Native American adults at both 30- and 70-year exposure durations. Cancer risk estimates for detected carcinogenic chemical at each sampling site are presented in Appendix I. Total cancer risk estimates are presented in Table 6.3 for each sampling site and for the basin average. Sampling sites were not replicated within a tributary and, therefore, tributary risk estimates were not calculated for Pacific lamprey.

Table 6-3. Total cancer risk for Pacific lamprey

CONSUMPTION RATE/ EXPOSURE DURATION	TISSUE TYPE	TOTAL EXCESS CANCER RISK		
		SITE ^a		BASIN AVERAGE
		21	24	
General Public^{a,b}				
AFC/30-yr	FS	3x10 ⁻⁵	na	3x10 ⁻⁵
	WB	3x10 ⁻⁵	4x10 ⁻⁵	4x10 ⁻⁵
HFC/30-yr	FS	6x10 ⁻⁴	na	6x10 ⁻⁴
	WB	6x10 ⁻⁴	8x10 ⁻⁴	7x10 ⁻⁴
AFC/70-yr	FS	7x10 ⁻⁵	na	7x10 ⁻⁵
	WB	8x10 ⁻⁵	1x10 ⁻⁴	9x10 ⁻⁵
HFC/70-yr	FS	1x10 ⁻³	na	1x10 ⁻³
	WB	1x10 ⁻³	2x10 ⁻³	2x10 ⁻³
Native American^{c,d}				
AFC/30-yr	FS	3x10 ⁻⁴	na	3x10 ⁻⁴
	WB	3x10 ⁻⁴	4x10 ⁻⁴	3x10 ⁻⁴
HFC/30-yr	FS	2x10 ⁻³	na	2x10 ⁻³
	WB	2x10 ⁻³	2x10 ⁻³	2x10 ⁻³
AFC/70-yr	FS	6x10 ⁻⁴	na	6x10 ⁻⁴
	WB	6x10 ⁻⁴	9x10 ⁻⁴	7x10 ⁻⁴
HFC/70-yr	FS	4x10 ⁻³	na	4x10 ⁻³
	WB	4x10 ⁻³	5x10 ⁻³	4x10 ⁻³

NOTE: AFC - average fish consumption
HFC - high fish consumption

FS - fillet with skin
WB - whole body

na - not applicable; sample type not analyzed at this site

^a AFC risk based on average U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 7.5 g/day, or 1 8-oz meal per month (USEPA 2000).

^b HFC risk based on 99th percentile U.S. per capita consumption rate of uncooked freshwater and estuarine fish for general public of 142.4 g/day, or 19 8-oz meals per month (USEPA 2000).

- ^c AFC risk based on average consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 63.2 g/day, or 9 8-oz meals per month (CRITFC 1994).
- ^d HFC risk based on 99th percentile consumption rate for fish consumers in the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin of 389 g/day, or 53 8-oz meals per month (CRITFC 1994).
- ^e Site - Waterbody: 21 - Willamette River ; 24 - Fifteen Mile Creek.

Chemicals with Estimated Risks At or Above 10^{-5}

Cancer risk estimates vary across populations, consumption rates, and exposure levels by constant factors. Chemicals with estimated cancer risks at or above 1×10^{-5} in Pacific lamprey fillet with skin and in whole body samples are shown for the Columbia River Basin Native American population with average fish consumption rates at a 70-year exposure duration; total cancer risks for all chemicals are also shown (Tables 6.4.1 and 6.4.2). Multiplicative factors used to estimate risk at different exposure parameters and target populations are footnoted in the table. In addition, Appendix I shows individual risk estimates for each detected chemical for all the exposure scenarios used in this risk assessment.

A total of 12 chemicals had cancer risks at or above 1×10^{-5} in whole body Pacific lamprey: adjusted Aroclors, PCB 105, PCB 114, PCB 118, PCB 126, 1,2,3,7,8-PeCDD, 2,3,7,8-TCDD, arsenic, total chlordane, hexachlorobenzene, and DDE. Fillet with skin had 11 chemicals with estimated risks at or above 1×10^{-5} - all those for whole body except PCB 114. PCB 126 had the highest risk estimate for both sites and tissue types. Adjusted Aroclors had the second highest risk estimate for both sites and tissue types. The individual Aroclors detected and used in the adjusted Aroclor calculation were Aroclor 1254 for whole body samples at Site 24 and fillet with skin samples at Site 21 and Aroclors 1260 and 1254 for whole body samples at Site 21. Arsenic had the third highest risk for whole body samples at Site 21. PCB 118 had the third highest risk for whole body samples at Site 24 and fillet with skin samples at Site 21.

Table 6.4.1. Chemicals with cancer risks at or above 1×10^{-5} for Columbia River Basin Native American population at average fish consumption and 70-year exposure duration in Pacific lamprey, whole body

Pacific Lamprey - Whole Body			
Chemical		Site	
		21	24
PCBs	Adjusted Aroclors	1E-04	2E-04
	PCB 105	1E-05	2E-05
	PCB 114		1E-05
	PCB 118	4E-05	7E-05
	PCB 126	4E-04	4E-04
	PCB 156	2E-05	3E-05
Dioxin/furans	1,2,3,7,8-PeCDD	2E-05	
	2,3,7,8-TCDF	2E-05	4E-05
Inorganic	Arsenic	4E-05	2E-05
Pesticides	Chlordane (total)	1E-05	2E-05
	Hexachlorobenzene	1E-05	1E-05
	DDE	1E-05	2E-05
Total Cancer Risk for All Chemicals		6E-04	9E-04

Table 6.4.2. Chemicals with cancer risks at or above 1×10^{-5} for Columbia River Basin Native American population at average fish consumption and 70-year exposure duration in Pacific lamprey fillet with skin

Pacific Lamprey - Fillet w-skin		
Chemical		Site
		21
PCBs	Adjusted Aroclors	1E-04
	PCB 105	2E-05
	PCB 114	1E-05
	PCB 118	5E-05
	PCB 126	2E-04
	PCB 156	2E-05
Dioxin/furans	1,2,3,7,8-PeCDD	2E-05
	2,3,7,8-TCDF	2E-05
Inorganic	Arsenic	4E-05
Pesticides	Chlordane (total)	1E-05
	Hexachlorobenzene	1E-05
	DDT	1E-05
	DDE	2E-05
Total Cancer Risk for All Chemicals		6E-04

NOTE: A blank indicates that this chemical does not have a cancer risk at or above 1×10^{-6} for this tissue type at this site.

To estimate risk levels for general population AFC 30-year exposure, divide the cells in this table by 19.64.
To estimate risk levels for general population HFC 30-year exposure, divide the cells in this table by 1.03.
To estimate risk levels for Native American AFC 30-year exposure, divide the cells in this table by 2.34.
To estimate risk levels for Native American HFC 30-year exposure, divide the cells in this table by 0.38.
To estimate risk levels for general population AFC 70-year exposure, divide the cells in this table by 8.43.
To estimate risk levels for general population HFC 70-year exposure, divide the cells in this table by 0.44.
To estimate risk levels for Native American AFC 70-year exposure, divide the cells in this table by 0.16.

^a Site - Waterbody: 21 - Willamette River ; 24 - Fifteen Mile Creek

