




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

April 12, 2011

Reply to: OEA-095
Attn of: grepo-grove.gina@epa.gov

MEMORANDUM

Subject: QA Narrative Report for Perchlorate Analysis of Water and Waste Water Samples
Collected from the Phase 3 Yakima Valley Nitrates Study

From:  Gina Grepo-Grove, R10 QA Manager
Office of Environmental Assessment, USEPA

To: Michael Cox, Project Officer, OEA
Curt Black, Project Manager
Sheila Fleming, Unit Manager, REU, OEA

CC: Stephen R Hutchins, TOPO, USEPA, NRMRL

The quality assurance (QA) review of the analytical data generated from the analysis of 30 samples collected from the above referenced site has been completed. These samples were analyzed for perchlorate following the SW846 Method 6850, "Perchlorate in Soils, Water and Wastes Using High performance Liquid Chromatography/Electrospray/Ionization (ESI) Mass Spectroscopy (MS) or Tandem Mass Spectroscopy (MS/MS). The analyses were performed by Shaw Environmental and Infrastructure, Inc. of the USEPA National Risk Management Research Laboratory, Ground Water and Ecosystems Restoration Division, Robert S. Kerr Environmental Research Center located in Ada, OK.

The following samples were evaluated in this validation report:

WW-01	WW-02	WW-03	WW-04	WW-05	WW-06
WW-07	WW-08	WW-09	WW-10	WW-11	WW-12
WW-13	WW-14	WW-15	WW-16	WW-17	WW-18
WW-19	WW-20	WW-21	WW-22	WW-23	WW-24
WW-25	WW-26	WW-27	WW-28	WW-29	WW-30

DATA QUALIFICATIONS

All sample analyses were evaluated following the EPA's Stage 2B Manual Data Validation Process (S2VM). The analyses were evaluated and laboratory qualifiers were mapped to R10 EPA validation qualifiers following the technical acceptance criteria and Quality Control Specifications outlined in the EPA Method 6850, the Shaw's in-house SOP and the Guidance for Labeling Externally Validated Laboratory Analytical Data for

Superfund Use (EPA-540-R08-005). The conclusions presented herein are based on the information provided for the review.

Overall Data Assessment:

Samples were analyzed following the technical specifications of the analytical methods. The technical acceptance criteria for QC were met by all analyses including the analytical duplicates (RPD=0). The data, as qualified, are usable for all purposes.

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate an associated out-of-control QA/QC results.

Data Qualifiers	
U	The analyte was not detected at or above the reported result.
J	The analyte was positively identified. The associated numerical result is an estimate.
UJ	The analyte was not detected at or above the reported estimated result. The associated numerical value is an estimate of the quantitation limit of the analyte in this sample.
R	The data are unusable for all purposes.
N	There is evidence the analyte is present in this sample.
JN	There is evidence that the analyte is present. The associated numerical result is an estimate.