

Note: This is a reference cited in AP 42, *Compilation of Air Pollutant Emission Factors, Volume I Stationary Point and Area Sources*. AP42 is located on the EPA web site at www.epa.gov/ttn/chief/ap42/

The file name refers to the reference number, the AP42 chapter and section. The file name "ref02_c01s02.pdf" would mean the reference is from AP42 chapter 1 section 2. The reference may be from a previous version of the section and no longer cited. The primary source should always be checked.

/24/

BR 2.2
#100
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PAGES REMOVED DURING

EDITORIAL REVIEW

(because quality might affect
further reproduction)

Entropy Environmentalists. Emissions of Metals,
Chromium and Nickel Species, and Organics from
Municipal Wastewater Sludge Incinerators. EPA/600/R-
92-003. May 1992.

SITE 6 PROCESS LOG

ENTROPY 9 Oct 87
Run #3 - Chrome

FURNACE # : 1

FURNACE LOG SHEET Oxygen from chart

TIME	HEARTH TEMPERATURES													F-DRAFT				FUEL OIL				BURNERS IN USE - % OUTPUT							REMARKS		
	PT. 1	PT. 2	PT. 3	PT. 4	PT. 5	PT. 6	PT. 7	PT. 8	PT. 9	PT. 10	PT. 11	PT. 12	PT. 13	DRAFT	BURN ZONE	VEN	CAL SCOR	METER	ICAL	2-1	2-2	4-1	4-2	5-1	5-2	7-1	7-2	% RPM CSMT		p _A C	O ₂ C ₁ C ₂
12:30	750	840	950	1180	1200	1540	1570	1580	1600	1600	1600	1600	1600	-3	26	32				30	50	80	-	-	-	-	-	5	6		Clunkers removed
12:45	810	1000	1120	1500	1540	1570	1580	1600	1600	1600	1600	1600	1600	-2	26	32				-	-	-	-	-	-	-	-	5	5.5		Slide fuel 55%
1:00	810	1020	1150	1500	1540	1570	1580	1600	1600	1600	1600	1600	1600	-2	25	30				-	-	-	-	-	-	-	-	5	5.5		Went back Pro 20
1:30	830	1050	1190	1510	1540	1570	1580	1600	1600	1600	1600	1600	1600	-25	25	30				30	-	-	-	-	-	-	-	6	2.5		
2:00	870	1100	1250	1520	1540	1570	1580	1600	1600	1600	1600	1600	1600	-32	25	31				15	30	-	-	-	-	-	-	6	9.0		
2:30	870	1100	1250	1520	1540	1570	1580	1600	1600	1600	1600	1600	1600	-28	25	32				-	-	25	-	-	-	-	-	8	6		
5:00	870	1100	1250	1520	1540	1570	1580	1600	1600	1600	1600	1600	1600	-16	24	30				-	35	40	40	-	-	-	-	9	7.5		Slide Fuel 55%
5:30	870	1100	1250	1520	1540	1570	1580	1600	1600	1600	1600	1600	1600	-35	24	31				-	35	40	40	-	-	-	-	6	7.0		Went back 20
6:00	870	1100	1250	1520	1540	1570	1580	1600	1600	1600	1600	1600	1600	-30	24	31				-	35	40	40	-	-	-	-	5	7.0		
6:30	870	1100	1250	1520	1540	1570	1580	1600	1600	1600	1600	1600	1600	-3	24	30				-	35	40	40	-	-	-	-	5	7.5		
7:00	870	1100	1250	1520	1540	1570	1580	1600	1600	1600	1600	1600	1600	-15	25	33				-	35	50	50	-	-	-	-	8	4		
Note: Burn out with remaining at approx 6:55 due to feed interruption. All fuel - 7:00 the hearth temp's increased dramatically.																															
3000 Went back 20																															

Oxygen read from chart.

FURNACE LOG SHEET

100001

TIME	HEARTH TEMPERATURES												DRAFT		FUEL OIL		BURNERS IN USE - % OUT PUT							REMARKS							
	PT. 1	PT. 2	PT. 3	PT. 4	PT. 5	PT. 6	PT. 7	PT. 8	PT. 9	PT. 10	PT. 11	PT. 12	DRAFT	BURN ZONE	VEN	KEY	FLW	METER READING	CAL USED	2-1	2-2	4-1	4-2		5-1	5-2	7-1	7-2	% RPM	CSHMT	
1	870	130	140	150	110	470	150	90	940	27	X	70	-3	-3	20	32					100	-	100	100					9	60	Sludge fuel 45%
2	840	140	150	160	90	460	150	90	980	27	X	70	-3	-3	27	33					100	-	80	80	100				9	60	Sludge fuel 55%
3	900	150	160	170	110	380	130	90	940	27	X	70	-25	-25	28	34					100	-	100	100					9	60	Sludge fuel 55%
4																															Sludge fuel 55%
5																															Sludge fuel 55%
6	930	160	170	180	130	410	130	90	970	27	X	70	-22	-22	29	35					100	100	-	100	100				7	5.0	Sludge fuel 55%
7	880	170	180	190	120	530	140	90	970	27	X	70	-15	-15	28	35					-	-	-	100	100				6	5.5	Sludge fuel 55%
8	890	180	190	200	150	500	130	90	940	27	X	70	-25	-25	28	34					60	-	-	100	100				4	7.0	Sludge fuel 55%
9	940	190	200	210	230	520	140	90	920	27	X	70	-2	-2	28	34					-	-	-	50	100				4	8	Sludge fuel 55%
10																															Sludge fuel 55%
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79																															Sludge fuel 55%
80																															Sludge fuel 55%
81																															Sludge fuel 55%
82																</															

Note: Problems with cake in. High very high lime addition. Sludge cake moisture content varying.

2 MINUTE

Oxygen read from chart

FURNACE LOG SHEET

ALTO

FURNACE

TIME	HEARTH TEMPERATURES													DRAFT			FUEL OIL		BURNERS IN USE - % OUTPUT							REMARKS					
	PT.1	PT.2	PT.3	PT.4	PT.5	PT.6	PT.7	PT.8	PT.9	PT.10	PT.11	PT.12	PT.13	DRAFT	AREA	FEET	VEN	SCAR	FLW	METER READING	CAL USED	2-1	2-2	4-1	4-2		5-1	5-2	7-1	7-2	% RPM
1:30	920	1080	1160	1250	1480	1610	160	90	940	270	X	150	100	-2	26	34						5	5	100	100						Sludge feed 578
2:00	1020	1240	1320	1400	150	150	200	90	940	270	X	160	100	-2	28	34						-	-	100	100						7 5.5
2:30	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
3:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
4:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						7 5.5
5:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						7 5.5
5:45	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
6:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
7:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
8:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
9:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
10:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
11:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
12:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
13:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
14:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
15:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
16:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
17:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
18:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
19:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
20:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
21:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
22:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
23:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
24:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
25:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
26:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
27:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
28:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
29:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
30:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
31:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
32:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
33:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
34:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
35:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
36:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
37:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
38:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
39:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
40:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
41:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
42:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
43:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
44:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
45:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
46:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
47:00	1020	1240	1320	1400	150	150	200	90	940	270	X	150	100	-2								-	-	5	100						6 7.5
48:00	1020	1240	1320	1400	150	150	200	90	940	27																					

ENTROPY

FURNACE LOG SHEET 11 Oct 67

T M	HEARTH TEMPERATURES													DRAFT			FUEL OIL		BURNERS IN USE - % OUTPUT							% RPM CSWAT	REMARKS				
	PT. 1	PT. 2	PT. 3	PT. 4	PT. 5	PT. 6	PT. 7	PT. 8	PT. 9	PT. 10	PT. 11	PT. 12	PT. 13	DRAFT	ZONE	VEN	SCAB	FI	METER	CAL USED	2-1	2-2	4-1	4-2	5-1			5-2	7-1	7-2	
1	1890	1880	1510	1420	1510	160	160	145	140	140	290	X	155	100	-					30		100	100	100	50					Sub. fuel 55%	
2			1510	1510	1440	160	170	100	110	100	X	155	100	-2					45		100	100	100	20	20						
3			1270	1400	160	170	100	100	100	100	X	150	110	-2					50		100	100	100	100							
4			1600	1690	1450	1600	135-135	1250	1250	1250	310	X	160	100	-2					58		100	100	100	5	5					
5														-																	
6														-2					59		100	100	100	100							
7	1750	1300	1380	1340	1350	1340	135	90	1050	30	X	150	100	-2					60		100	100	100	5	5						
8	1790	1520	1640	1560	1650	160	150	90	1140	320	X	150	100	-15					50		100	100	100	5	5						
9	1040	1400	1610	1700	1730	160	130	90	1140	320	X	150	100	-15					63		100	100	100	80	80						
10	1070	1570	1710	1720	1610	170	120	90	1190	320	X	160	100	-15					68		100	100	100	100	100						
11	1020	1520	1650	1740	1050	120	120	90	1140	320	X	150	100	-15																	
12																															
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The first run (LOW PR) caused a lot of NOISE.

The second run (LOW CO) was achieved with a high flame #1 (Pant #1) and valves (Pant #9) temp.

1 Oct 1950

Mark Lewis

The first run (low or) caused a lot of smoking.
The second run (low CO) was achieved with a high flame #1 (Pent #1) and offgas (Pent #9) temp.

11 Oct 67
Mark Lewis

<u>Point No</u>	
1	Hearth #1
2	" #2
3	" 3
4	" 4
5	" 5
6	" 6
7	" 7
8	" 8
9	Furnace Exhaust
10	Shaft Cooling Air
11	Afterburner (not used)
12	Tray scrubber inlet
13	I.D. Fan inlet

Point #1 → #8 = Humid ~~Temp~~ #1 → #8 Temp, a F

Point #9 = Outlet Breaching temp

Point #10 = Exhaust cooling air outlet temp

Point #11 NOT USED

Point #12 = Venturi scrubber gas outlet temp

Point #13 = I.D. fan inlet temp

Pres Pir = Venturi scrubber pressure drop, "w.c.

Pres Scrab = (Venturi + Tray) scrubber pressure drop, "w.c.

Note: Tray scrubber $\Rightarrow P = (\text{Pres Scrab} - \text{Pres Pir}) \approx 5" \text{ w.c. avg}$

Oxygen read from strip chart.

[illegible]

EN TERRY

Oxygen read from strip chart

FURNACE LOG SHEET

1304 89

FURNACE #2

1

HEARTH TEMPERATURES														DRAFT				FUEL OIL		BURNERS IN USE - % OUTPUT						% RPM CSWAT	P ₉ C	O ₂ C ₁ C ₂ C ₃	REMARKS							
T	M	E	PT.1	PT.2	PT.3	PT.4	PT.5	PT.6	PT.7	PT.8	PT.9	PT.10	PT.11	PT.12	PT.13	DRAFT	BURN ZONE	VEN	PRESS	SCOR	FLUE	METER READING	CAL USED	2-1	2-2	4-1	4-2	5-1	5-2	7-1	7-2					
1	830		110	110	140	140	140	180	180	180	200	200	200	200	200	-2	30	35				7656	37			L	L	100	100					8		Strip feed
2	850		110	110	130	130	140	140	140	140	140	140	140	140	140	-2	30	35				7701	44			L	L	L	L					8		55%
3	870		110	110	130	130	140	140	140	140	140	140	140	140	140	-2	31	38				7720	29			L	L	L	L					7.5		
4	890		110	110	130	130	140	140	140	140	140	140	140	140	140	-2	30	37				7760	30			100	100	20	20					7		7.5
5																-						7800	40			-	-	20	20					7		7.5
6	840		110	110	140	140	140	140	140	140	140	140	140	140	140	-2	30	38				7822	22													
7																																				
8																																				
9																																				
10																																				
11																																				
NOV																																				
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9																																				
10																																				
11																																				

Run 13

1304 89

SITE 8 PROCESS LOG

Shift	GRN	Has Den	WTS	RR Time					
8 Jan	18-8	66	8	21.7	11:00 PM	452.880			
	8-4	2/95 4/5/35	8	23.2	9:00	494.115			
	4-12	80	8	23.2	15:00	556.426	496.366		
9 Jan	12-8	50	8	23.1	11:00 PM	515.969			
	8-4	85	7	23	9:00	538.817			
	4-12	70	8	24.6	15:00	556.126			
10 Jan	12-8	65	8	22.2	11:00	573.496			
	8-4	65	5.5	25.7	9:00	598.58			
	4-12	75	6.5	24.67	15:00	609.906			
11 Jan	12-8	75	8	24.1	11:00	621.520			
	8-4	75	8	25.0	9:00	659.830			
	4-12	80	6.5	25.1	15:00	658.400			
12 Jan	12-8	75	8	26.2	9:00	—			
	8-4					0?			
	4-12					445.15148			

Time	Rate Total Tons	Oil Total Gallons	GPR	Feet Hrs	Cost Per Ct
9:11		50237			25.0%
9:15	482605	50268			
10:25	486329	50257			
11:30	488051	50313	75		
12:00	452.128	50363			
1:25		50380			24.0%
2:25	494.831	50550			23.16
3:25			75	4.24%	
4:15	453.483	50433			22.20
4:35			80		22.85
5:45			80		19.05
9:15	496.366	50581			
3:00	538.817				
4:00	551.086	91029			
12:00					
12:35					22.38
14:00	553.565	91052			
14:30					25.87
19:00		91123			24.60

DATE	TIME	SCUMPS TOTAL PER TRIP	GPM	FEED to BPT %T.S	CEK %T.S	OIL TAPACER				
10 Jan	9:00	593.138								
	10:30	596.164			24.18	91505				
	12:30	601.001		5.27	25.14	91555				
	14:35	606.181				91608				
	15:00	609.906			24.24					
	15:30			5.26 5.42	24.67					
11 Jan	17:30									
	9:15	645.559				92052				
	9:30	2*		4.34	24.63					
	10:15					92052				
	10:30	649.522								
	11:00			5.19	23.81					
12 Jan	11:20	650.381				92041				
	13:00	654.482		4.93	24.34	92002				
	14:00	656.530				92121				
	15:00	658.400								
	15:10			4.93	26.02					
	8:35 11:30					20.954 25.030				

TEST SITE #8

INCINERATOR OPERATING LOG

DATE: Tuesday 1-09-90

	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
POI 111	58	57	56	56	56	55	54			58		57	58	58	58	57	58	58	57	57	57	57	57	57
PI 109	100	100	100	100	100	100	100			99		101	100	98	99	99	100	100	100	101	100	100	101	100
POI 110	24	24	23	25	25	25	25			23		25	24	25	24	24	24	22	24	24	24	24	24	24
PI 112	36	39	36	37	37	37	38			36		36	36	35	35	34	36	35	36	37	35	35	37	39
PI 113	11	10	10	10	10	9	9			8		10	10	33	33	33	33	33	34	33	33	33	34	33
PI 114	31	31	30	31	31	31	31			32		32	31	31	31	31	31	31	32	32	31	31	31	33
AIR 502	0	11	0	11	10	16	5			16		5	10	11	4	12	3	0	0	0	0	0	0	0
AR 501	6.0	6.1	5.8	6.0	5.7	6.0	5.6	11		4.9		4.7	4.9	5.1	5.1	5.3	5.1	5.0	4.3	4.8	5.1	5.3	4.6	4.6
FI 201	101	102	101	103	103	102	103	10		101		100	101	99	98	98	101	98	98	99	98	97	96	98
FIC 201	3918	3048	2989	3045	3044	3075	3018	5		2957		3081	3119	2992	3081	2994	3013	3082	3055	3038	3047	3064	3018	3006
FI 401	113	112	112	111	111	110	110			112		117	119	121	123	123	119	118	116	117	117	118	119	120
FI 402	949	998	806	800	810	800	805			823		821	825	826	826	823	821	818	834	829	813	810	827	835
FI 403	644	645	644	644	644	645	645			643		640	640	640	640	640	643	643	643	644	645	645	645	646
FI 404-1	1342	1344	1304	1357	1355	1347	1357			1360		1316	1354	1355	1362	1359	1355	1347	1347	1365	1352	1331	1345	1337
FI 404-2	80	80	80	80	80	80	80			80		80	80	80	80	80	80	80	80	80	80	80	80	80
FI 404-3	280	280	280	280	280	280	280			280		280	280	280	280	280	280	280	280	280	280	280	280	280
FI 405	1473	1475	1481	1480	1484	1478	1487			1504		1512	1501	1500	1504	1499	1501	1489	1506	1511	1486	1483	1505	1507
FI 406	1512	1514	1524	1522	1534	1516	1531			1533		1512	1531	1527	1526	1517	1525	1522	1510	1538	1513	1509	1529	1532
FI 407	1149	1149	1154	1152	1161	1151	1158			1158		1162	1163	1161	1160	1156	1159	1158	1174	1170	1152	1149	1166	1165
FICV-1	20	20	20	20	20	20	20			20		20	18	18	18	18	18	18	18	18	18	18	18	18
FICV-2	20	20	20	20	20	20	20			20		20	15	15	15	15	15	15	15	15	15	15	15	15
FICV-3	-	-	-	-	-	-	-			-		-	-	-	-	-	-	-	-	-	-	-	-	-
FICV-4	-	-	-	-	-	-	-			-		-	-	-	-	-	-	-	-	-	-	-	-	-
COMPRESSOR PSI	90	100	95	100	105	100	100			90		90	96	90	90	95	90	100	95	105	105	100	100	95
COMPRESSOR °F	160	165	160	160	165	165	165			160		160	160	160	160	160	160	160	160	160	160	160	160	160
STACK TEMP	-	-	-	-	-	-	-			-		-	-	-	-	-	-	-	-	-	-	-	-	-
VENTURI PRESS. DROP	30	30	31	30	30	30	31			31		31	30	31	31	31	31	31	34	32	31	30	32	32
DILUTION PUMP PRPG	425	425	425	425	425	425	425			425		425	425	425	425	425	425	425	425	425	425	425	425	425
OIL FLOWING	90684	90229	90234	90780	90824	90850	90897			90944		91000	91027	91052	91077	91100	91123	91150	91174	91202	91226	91250	91277	91301
X FEED SOLIDS	91834	91891	1892	1901	1910	1870	1868			2407		2388	2340	2406	2414	2437	2439	2433	2415	2412	2418	2425	2434	2434
GPM TO BELT PRESS																								

POI 115

WednesdayWednesday

103

TEST SITE #8

DATE: 1-11-90

OPERATING LOG

INCINERATOR

DATE: 1-11-90

	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
POI 111	63	62	63	62	61	62	61	60	62	60	63	60	62	62	62	62	61	60	61	60	61	60	61	60
PI 109	106	105	107	107	106	106	106	107	106	106	105	105	105	104	105	104	105	104	104	105	105	105	105	105
POI 110	25	24	24	24	25	25	24	23	24	24	24	24	24	23	24	24	23	24	24	23	23	23	23	23
PI 112	37	38	37	37	37	37	37	38	37	38	36	38	38	36	38	37	37	37	37	37	37	37	37	37
PI 113	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
PI 114	32	33	32	32	33	33	33	33	33	33	34	32	32	32	33	32	33	33	32	32	32	32	32	32
AI 502	0	0	11	18	0	0	4	0	1	1	0	5	0	0	10	21	18	12	0	0	0	0	0	0
AR 501	5.2	5.3	5.4	5.2	5.7	5.5	5.6	5.1	5.1	4.6	4.5	4.5	4.5	4.5	4.1	4.5	4.4	4.5	4.3	4.6	4.6	4.6	4.6	4.6
FI 201	101	100	101	100	100	100	101	102	100	101	99	101	100	100	97	97	94	94	99	99	99	99	99	99
FIC 201	2093	3050	3042	3015	2911	3080	3009	3078	3092	2951	2895	3007	3020	2954	3171	2835	2783	2117	2712	2923	2972	2972	2972	2972
TI 401	118	117	117	117	116	115	115	113	114	116	118	119	119	121	121	131	121	120	120	120	120	120	120	120
TI 402	821	817	814	816	810	814	809	819	819	828	832	834	841	840	845	831	839	839	838	832	824	824	824	824
TI 403	636	633	632	632	633	634	635	635	636	636	638	629	640	641	612	613	643	644	645	645	677	677	677	677
TI 404-1	1397	1397	1400	1405	1392	1398	1397	1397	1381	1377	1374	1362	1355	1352	1367	1356	1356	1347	1341	1357	1363	1363	1363	1363
TI 404-2	80	80	80	80	80	80	80	80	80	80	80	80	85	80	80	80	80	80	80	80	80	80	80	80
TI 404-3	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260
TI 405	1575	1521	1517	1518	1504	1574	1508	1515	1511	1518	1520	1514	1514	1518	1519	1512	1514	1513	1516	1510	1510	1510	1510	1510
TIC 406	1530	1531	1530	1532	1516	1576	1520	1531	1526	1530	1537	1533	1540	1535	1538	1527	1534	1532	1532	1529	1529	1527	1527	1527
TI 407	1159	1159	1160	1160	1157	1159	1154	1164	1163	1163	1172	1171	1176	1173	1176	1165	1171	1172	1169	1166	1162	1162	1162	1162
FICV-1	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
FICV-2	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
FICV-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FICV-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COMPRESSOR PSI	85	90	90	90	85	90	90	90	90	100	90	90	90	90	105	105	95	90	95	85	70	70	70	70
COMPRESSOR °F	160	160	160	160	160	160	160	160	160	155	155	155	155	155	160	160	155	155	155	155	165	165	165	165
STACK TEMP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VENTURI PRESS. DROP	31	32	31	32	31	32	32	32	32	32	33	32	32	32	33	32	32	31	31	31	31	31	31	31
DIAPHRAGM PUMP PRESS	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215
OIL FEEDING	9865	9816	9907	9926	9945	9966	9989	9989	9989	9989	9989	9989	9989	9989	9989	9989	9989	9989	9989	9989	9989	9989	9989	9989
* FEED SOLIDS	22.46	22.58	22.44	22.35	22.26	21.60	21.05	21.63	21.73	21.76	21.72	21.85	21.67	21.55	21.51	21.42	21.91	21.61	21.45	21.53	21.53	21.53	21.53	21.53
CPM TO BELT PRESS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BURNING oil only
BURNING oil only
Feed. ... Recalibrating

TEST SITE #8

INCINERATOR - OPERATING LOG

DATE:

Friday

1-12-90

	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
POI 111	62	60	60	61	60	61	59	60	59	62	58													
PI 109	103	105	104	104	104	105	104	104	104	105	102	103												
POI 110	22	24	24	24	24	23	24	24	24	24	24	23												
PI 112	37	38	38	39	37	37	38	38	38	35	36													
PI 113	34	34	34	34	34	34	34	34	34	33	33													
PI 114	32	34	34	33	33	33	33	33	33	33	31	32												
AIH 502	0	0	0	0	0	0	0	0	0	26	25	32												
AR 501	4.6	4.8	4.7	5.1	5.0	4.9	4.7	4.6	4.7	5.8	4.9													
II 201	60	91	98	99	100	100	101	97	102	103	100													
FIC 201	3004	3045	2959	2959	3044	2894	2819	3040	2982	2995	2943													
II 401	119	117	118	118	118	118	118	119	119	120	120													
II 402	821	830	835	821	819	825	828	838	835	823	827													
II 403	639	630	627	625	626	627	628	629	621	623	624													
II 404-1	1300	1307	1304	1340	1352	1365	1369	1374	1390	1401	1353													
II 404-2	80	80	80	80	80	80	80	80	80	80	80													
II 404-3	340	340	340	340	340	340	340	340	340	340	230													
II 405	1513	1519	1519	1496	1501	1511	1515	1521	1528	1516	1523													
II 406	1530	1534	1535	1515	1520	1527	1527	1537	1539	1527	1527													
II 407	1151	1165	1166	1156	1158	1163	1165	1174	1175	1161	1164													
FICV-1	20	20	20	20	20	20	20	20	20	20	20													
FICV-2	20	20	20	20	20	20	20	20	20	20	20													
FICV-3	-	-	-	-	-	-	-	-	-	-	-													
FICV-4	-	-	-	-	-	-	-	-	-	-	-													
COMPRESSOR PSI	90	90	85	90	90	85	90	90	90	90	115													
COMPRESSOR °F	160	160	160	160	160	160	155	155	155	155	155													
STACK TEMP	-	-	-	-	-	-	-	-	-	-	-													
VENTURI PRESS. DROP	32	33	33	32	32	32	33	33	33	30	32													
DIAPHRAGM PUMP PHASE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES													
OIL FEEDING	9263	9269	9240	9243	9245	9247	9245	9247	9245	9255	9251													
X FEED SOLIDS	2164	2121	2298	2321	2344	2440	2413	2494	2352	2382	2365													
GPM TO BELT PRESS																								

Month: Jan

Year: 1990

"FUEL USAGE REPORT"

[illegible]

Legend: WU=Water Usage for Quench Nozzles (gals.) HO=Hours of Operation
OU=Oil Used (gals.) SB=Sludge Burned per conveyor belts (in wet pounds)

SITE 9 PROCESS LOG

FURNACE DAILY LOG SHEET

DATE

5-30-90

SLUDGE

TEMPERATURES

TIME	WEIGHT METER	LBS. HR.	PT-1	PT-2	PT-3	PT-4	PT-5	PT-6	PT-7	PT-8	PT-9	PT-11	PT-12	PT-13	#1	#4	FURN		VENTURI PRESSURE	SCRUBBER PRESSURE	VENTURI/SCRUB PRESSURE	GAS/OIL METER READ.		BURNERS IN USE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
			H-1	H-2	H-3	H-4	H-5	H-6	H-7	ADJUGS	ADJUGS	ADJUGS	ADJUGS	ADJUGS	ADJUGS	#1	#4						H-3	H-5	H-7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
7 AM	1160	1505	880	1190	1332	1353	1029	728	449	-	91	1085	84	137	2	-	21	14	37	014/167	2/3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								</

OXYGEN

FURNACE DAILY LOG SHEET

DATE 5-31-90

SLUDGE

TEMPERATURES

TIME	WEIGHT NETER	LBS. HR.	PT-1	PT-2	PT-3	PT-4	PT-5	PT-6	PT-7	PT-8	PT-9	PT-11	PT-12	PT-13	FURN DRAFT		VENFURI PRESSURE	SCRUBBER PRESSURE	VENFURI/SCRU PRESSURE	GAS/OIL METER READ.	G.P.H.	BURNERS IN USE						
			H-1	H-2	H-3	H-4	H-5	H-6	H-7	****	****	****	****	****	H-1	H-4						H-3	H-5	H-7	1	2	3	4
7 AM																												
8 "	22388082	3128	917	1305	1148	1251	1111	997	472		94	1055	85	158	6	12	20	20	41	6077	74							
9 "	" 9747	1165	817	1108	1411	1378	1043	944	470		96	835	83	135	10	12	30	10	40	6782	51							
10 "	91080	1322	835	1105	1124	1183	1280	1160	627		47	1009	90	158	7		30	11	40	664	252							
11 "	" 592490	1410	779	1019	1218	1245	1078	942	400		100	921	87	146	10	12	30	10	40	68253	31							
12 N	" 114020	1540	769	1029	1257	1306	1116	976	476		101	941	88	149	10	12	30	10	40	690	33							
1 PM																												
2 "	" 47120	3090	711	903	1194	1240	1097	1000	447		103	760	86	141	10	12	30	10	40	645	58							
3 "	2398492	1372	818	1054	1245	1387	996	785	362		105	859	80	136	10		24	17	39098	267	3							
4 "	240004	1507	863	1122	1336	1350	972	843	356		106	917	87	140	10		30	10	40	101	27	3						
5 "	1563152	1522	795	1023	1335	1281	1120	935	355		107	902	85	140	10		30	9	40	104	275	3						
6 "	2204134	1341	843	1080	1372	1402	1010	874	350		109	889	79	138	8		28	11	40	107	283	3						
7 "	4245	1340	816	1012	1310	1355	1070	827	311		110	955	783	144	10		30	9	40	110	282	3						
8 "																												
9 "	" 7077232	1332	736	990	1332	1393	1135	882	332		108	838	79	135	3		25	76	59	115	287	5						
10 "	8411		762	1016	1357	1413	1134	799	305		106	872	85	137	8		30	10	40	117	290	3						
11 "	409796	1385	730	942	1265	1310	1106	716	249		103	835	84	143	5		30	11	40									
1 PM	412558	2722	754	932	1271	1291	966	633	311		102	764	80	129	8		30	9	41	67125								
2 AM																												
2 "	414010	1452	788	1042	1391	1424	1022	612	247		101	819	78	135	9		30	10	41	67128	3							
3 "	415450	1440	761	1099	1363	1401	1118	843	256		100	893	86	141	14		28	10	41	67130	2							
4 "	416126	1474	740	1000	1313	1404	1071	850	251		100	880	85	141	12		30	10	41	67133	2							
5 "	418427	1449	739	927	1250	1396	1091	864	243		98	872	84	140	5		34	9	12	67135	3							
6 "	419876	1449	730	1000	1264	1325	1131	696	209		100	823	83	136	8		30	10	41	67138	3							

P-12 I. D. FAN INLET/SCRUBBER OUTLET

PT-11 FURNACE BREECING

PT-8 ASH OUTLET

PT-9 CENTER SHAFT COOLING AIR EXHAUST

SPECIAL NOTES :

FURNACE DAILY LOG SHEET

DATE

6-1-90

TEMPERATURES

SLUDGE

TIME	WEIGHT METER	LBS. HR.	TEMPERATURES										FURN DRAFT		VENTURI PRESSURE	SCRUBBER PRESSURE	VENTURI/SCRUB PRESSURE	GAS OIL METER READ.	G.P.H.	BURNERS IN USE					
			PT-1 H-1	PT-2 H-2	PT-3 H-3	PT-4 H-4	PT-5 H-5	PT-6 H-6	PT-7 H-7	PT-8 H-8	PT-9 H-9	PT-11 H-11	PT-12 H-12	PT-13 H-13	PT-14 H-14										
AM																									
"																									
"																									
0 "																									
1 "																									
2 "																									
3 "																									
4 "																									
5 "																									
6 "																									
7 "																									
8 "																									
9 "																									
10 "																									
11 "	428513		814	928	1226	1328	813	531	429	429	109	842	82	140	7	29	38	67238							
12 M	429862	1349	904	1162	1520	1521	872	533	432	432	111	979	83	139	12	25	35	67235							
1 AM	431433	1571	987	1287	1475	1384	1036	636	413	413	109	1086	89	147	9	23	35	67243	5						
2 "	433162	1729	914	1160	1434	1414	997	555	354	354	109	944	78	136	10	20	35	67247	4						
3 "	454754	1592	780	898	1337	1326	815	443	257	257	108	733	78	127	6	27	35	67255	4						
4 "	436402	1648	806	944	1389	1411	915	475	278	278	109	750	80	126	13	24	34	67254	3						
5 "	438056	1654	967	1210	1323	1277	1089	936	259	259	109	1063	84	151	5	18	34	67257	3						
6 "	439710	1654	961	1240	1445	1405	1168	741	340	340	109	1058	89	144	16	22	34	67261	4						

SPECIAL NOTES : PT-8 ASH OUTLET PT-11 FURNACE BREECING
PT-9 CENTER SHAF COOLING AIR EXHAUST

P-12 I. D. FAN INLET/SCRUBBER OUTLET
P-13 SCRUBBER INTLET

FURNACE DAILY LOG SHEET

DATE

6-2-90

TEMPERATURES

SLUDGE

TIME	WEIGHT METER	LBS. HR.	PT-1 H-1	PT-2 H-2	PT-3 H-3	PT-4 H-4	PT-5 H-5	PT-6 H-6	PT-7 H-7	PT-8 ****	PT-9 ****	PT-11 ****	PT-12 ****	PT-13 ****	FURN DRAFT	VENTURI PRESSURE	US SCRUBBER PRESSURE	VENTURI/SCRUB PRESSURE	GAS/OIL METER READ.	G.P.H.	BURNERS IN USE					
7 AM																										
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7 "																										
8 "	22447688		8851092	1299	1215	947	654	210		957	82	142	13													
9 "	22449257	1504	854	1087	1277	1197	986	626	199		120	865	96	144	19											
10 "	50603	1646	752	969	1168	1191	1004	764	220		118	879	81	149	13											
11 "																										
12 M	51028	3425	966	1231	1410	1314	1114	630	191		116	1071	66	156	11											
1 AM	55233	1205	871	1088	1334	1314	987	547	330		117	949	88	150	8											
2 "	56845	1612	924	1200	1590	1323	1094	753	354		116	1031	91	152	6											
3 "	58454	1129	816	947	1311	1325	937	558	206		116	792	78	140	10											
4 "	60102	1448	111	898	1266	1305	1040	890	231		115	792	83	146	8											
5 "	62036	1937	733	814	1247	1304	899	608	219		115	683	76	127	14											
6 "	63897	1856	816	1023	1346	1387	1023	754	279		114	902	80	148	6											

SPECIAL NOTES : PT-8 ASH OUTLET

PT-11 FURNACE BRICKLING

FOR A CORRECTED CHARGE COVERING AND LUMINANCE

P-12 I. D. FAN INLET/SCRUBBER OUTLET

FURNACE DAILY LOG SHEET

DATE

6-3-90

SLUDGE

WEIGHT

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FURNACE DAILY LOG SHEET

DATE: 6-4-90

TEMPERATURES

FURNACE DAILY LOG SHEET										DATE: 6-4-90										OXYGEN									
FURNACE DAILY LOG SHEET										TEMPERATURES										BURNERS IN USE									
SLUDGE										FURN DRAFT										G.P.H.									
WEIGHT METER										VENTURI PRESSURE										GAS/OIL METER READ.									
ME										VENTURI PRESSURE										GAS/OIL METER READ.									
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SPECIAL NOTES : PT-8 ASH OUTLET PT-11 FURNACE BRACKETING
PT-9 CENTER SHAFT COOLING AIR EXHAUST
P-12 I. D. FAN INLET/SCRUBBER OUTLET
P-13 SCRUBBER INT.FAN

SLUDGE

TEMPERATURES

LINE	WEIGHT NET WT	LBS. HR.	PT-1	PT-2	PT-3	PT-4	PT-5	PT-6	PT-7	PT-8	PT-9	PT-10	PT-11	PT-12	PT-13	FURN DRAFT	VENTURI PRESSURE	SCRUBBER PRESSURE	VENTURI/SCRUB PRESSURE	GAS OIL METER READ.	G.P.H.	BURNERS IN USE						
			H-1	H-2	H-3	H-4	H-5	H-6	H-7	****	****	****	****	****	****							H-3	H-5	H-7	1	2	3	4
AM																												
"																												
"	529900	2909	1024	1389	1319	1293	356	371	232		102	1279	84	144	144	-3.1	34	5	37									
0 "																												
1 "	532470	2570	1117	1466	1200	1223	406	409	367		107	1362	90	151	151	-7.1	35	8	40	525	35							
2 N																												
PM	525100	2630	1129	1467	1166	1196	391	398	365		109	1352	90	150	150	-10.1	35	7	41	527	124							
"	536325	1225	1176	1523	1198	1205	367	379	345		111	1364	89	151	151	-9.1	35	7	41	543	67							
"	537643	1318	1120	1421	1265	1234	406	407	383		111	1357	89	150	150	-5.0	35	8	41	550	712							
"											113	1288	87	148	148	-7.5	34	8	41									
"	540322	1679	1096	1360	1253	1228	318	466	494		113	1288	87	148	148	-7.5	34	8	41	563	796							
"	541576	1256	1129	1404	1243	1242	468	447	467		114	1373	91	152	152	-11.5	33	8	41									
"											115	1341	90	152	152	-4.0	33	8	41	583	817							
3 "	544236	2658	1144	1448	1249	1247	452	448	415		115	1341	90	152	152	-10.2	34	8	41									
4 "											117	1248	89	149	149	-7.5	34	8	41									
5 "	546972	2726	1151	1446	1249	1221	432	445	501		117	1248	89	149	149	-7.5	34	8	41									
6 "											111	1228	91	151	151	-11.2	32	8	41	610	847							
7 M	49423	2451	1234	1430	1145	1116	434	456	531		111	1228	91	151	151	-11.2	32	8	41	610	847							
8 AM	506982	1259	1186	1422	1244	1241	451	473	587		109	1371	91	151	151	-6.0	34	8	41	616	854							
9 "	51936	1254	1173	1520	1228	1237	446	465	571		107	1417	91	152	152	-7.0	34	8	41	623	861							
10 "											106	1349	99	149	149	-7.1	33	8	41	688	866							
11 "	53208	1272	1140	1453	1215	1221	438	464	566		104	1394	90	150	150	-5.1	35	8	41	637	877							
12 "	54545	1332	1152	1434	1169	1214	442	462	576		104	1394	90	150	150	-5.1	35	8	41	637	877							
13 "	55859	1314	1148	1472	1182	1214	431	457	573		101	1356	92	151	151	-5.1	34	8	41	644	884							
14 "	57120	1261	1131	1421	1184	1211	422	473	612		103	1353	90	151	151	-5.1	34	8	41	650	892							

SPECIAL NOTES : PT-8 ASH OUTLET PT-11 FURNANCE BREACHING P-12 I. D. FAN INLET/SCRUBBER OUTLET

Steve + Dennis
Diamond & John

FORM# 7

FURNACE DAILY LOG SHEET

DATE 6-6-90

TIME	SLUDGE WEIGHT METER	LBS. HR.	TEMPERATURES											H-3	H-5	H-7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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SPECIAL NOTES • PT-8 ASH OUTLET PT-11 EXHAUST BREASTING

BURNERS IN USE

[illegible]

SPECIAL NOTES	PT-8 ASH OUTLET	PT-11 PERFORMANCE IMPROVING	P-12 I. D. FAN INLET/SCROBBER OUTLET
	PT-9 CENTER SHAFT COOLING AIR EXHAUST		P-13 SCROBBER INLET

FURNACE DAILY LOG SHEET

DATE 6-8-90

② Steve + Almond
③ Tom + John

FORM # 1

FURNACE DAILY LOG SHEET

DATE 6-8-90

③ Tom + John

FURNACE DAILY LOG SHEET	PERCENT OXYGEN	TEMPERATURES	FURN DRAFT	FURN INLET/SCRUBBER PRESSURE	SCRUBBER PRESSURE	FURN INLET/SCRUBBER PRESSURE	GAS/OIL METER READ.	S.P.H.	BURNERS IN USE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
TIME	SLUDGE WEIGHT METER	PT-1	PT-2	PT-3	PT-4	PT-5	PT-6	PT-7	PT-8	PT-9	PT-10	PT-11	PT-12	PT-13	PT-14	PT-15	PT-16	PT-17	PT-18	PT-19	PT-20	PT-21	PT-22	PT-23	PT-24	PT-25	PT-26	PT-27	PT-28	PT-29	PT-30	PT-31	PT-32	PT-33	PT-34	PT-35	PT-36	PT-37	PT-38	PT-39	PT-40	PT-41	PT-42	PT-43	PT-44	PT-45	PT-46	PT-47	PT-48	PT-49	PT-50	PT-51	PT-52	PT-53	PT-54	PT-55	PT-56	PT-57	PT-58	PT-59	PT-60	PT-61	PT-62	PT-63	PT-64	PT-65	PT-66	PT-67	PT-68	PT-69	PT-70	PT-71	PT-72	PT-73	PT-74	PT-75	PT-76	PT-77	PT-78	PT-79	PT-80	PT-81	PT-82	PT-83	PT-84	PT-85	PT-86	PT-87	PT-88	PT-89	PT-90	PT-91	PT-92	PT-93	PT-94	PT-95	PT-96	PT-97	PT-98	PT-99	PT-100	PT-101	PT-102	PT-103	PT-104	PT-105	PT-106	PT-107	PT-108	PT-109	PT-110	PT-111	PT-112	PT-113	PT-114	PT-115	PT-116	PT-117	PT-118	PT-119	PT-120	PT-121	PT-122	PT-123	PT-124	PT-125	PT-126	PT-127	PT-128	PT-129	PT-130	PT-131	PT-132	PT-133	PT-134	PT-135	PT-136	PT-137	PT-138	PT-139	PT-140	PT-141	PT-142	PT-143	PT-144	PT-145	PT-146	PT-147	PT-148	PT-149	PT-150	PT-151	PT-152	PT-153	PT-154	PT-155	PT-156	PT-157	PT-158	PT-159	PT-160	PT-161	PT-162	PT-163	PT-164	PT-165	PT-166	PT-167	PT-168	PT-169	PT-170	PT-171	PT-172	PT-173	PT-174	PT-175	PT-176	PT-177	PT-178	PT-179	PT-180	PT-181	PT-182	PT-183	PT-184	PT-185	PT-186	PT-187	PT-188	PT-189	PT-190	PT-191	PT-192	PT-193	PT-194	PT-195	PT-196	PT-197	PT-198	PT-199	PT-200	PT-201	PT-202	PT-203	PT-204	PT-205	PT-206	PT-207	PT-208	PT-209	PT-210	PT-211	PT-212	PT-213	PT-214	PT-215	PT-216	PT-217	PT-218	PT-219	PT-220	PT-221	PT-222	PT-223	PT-224	PT-225	PT-226	PT-227	PT-228	PT-229	PT-230	PT-231	PT-232	PT-233	PT-234	PT-235	PT-236	PT-237	PT-238	PT-239	PT-240	PT-241	PT-242	PT-243	PT-244	PT-245	PT-246	PT-247	PT-248	PT-249	PT-250	PT-251	PT-252	PT-253	PT-254	PT-255	PT-256	PT-257	PT-258	PT-259	PT-260	PT-261	PT-262	PT-263	PT-264	PT-265	PT-266	PT-267	PT-268	PT-269	PT-270	PT-271	PT-272	PT-273	PT-274	PT-275	PT-276	PT-277	PT-278	PT-279	PT-280	PT-281	PT-282	PT-283	PT-284	PT-285	PT-286	PT-287	PT-288	PT-289	PT-290	PT-291	PT-292	PT-293	PT-294	PT-295	PT-296	PT-297	PT-298	PT-299	PT-300	PT-301	PT-302	PT-303	PT-304	PT-305	PT-306	PT-307	PT-308	PT-309	PT-310	PT-311	PT-312	PT-313	PT-314	PT-315	PT-316	PT-317	PT-318	PT-319	PT-320	PT-321	PT-322	PT-323	PT-324	PT-325	PT-326	PT-327	PT-328	PT-329	PT-330	PT-331	PT-332	PT-333	PT-334	PT-335	PT-336	PT-337	PT-338	PT-339	PT-340	PT-341	PT-342	PT-343	PT-344	PT-345	PT-346	PT-347	PT-348	PT-349	PT-350	PT-351	PT-352	PT-353	PT-354	PT-355	PT-356	PT-357	PT-358	PT-359	PT-360	PT-361	PT-362	PT-363	PT-364	PT-365	PT-366	PT-367	PT-368	PT-369	PT-370	PT-371	PT-372	PT-373	PT-374	PT-375	PT-376	PT-377	PT-378	PT-379	PT-380	PT-381	PT-382	PT-383	PT-384	PT-385	PT-386	PT-387	PT-388	PT-389	PT-390	PT-391	PT-392	PT-393	PT-394	PT-395	PT-396	PT-397	PT-398	PT-399	PT-400	PT-401	PT-402	PT-403	PT-404	PT-405	PT-406	PT-407	PT-408	PT-409	PT-410	PT-411	PT-412	PT-413	PT-414	PT-415	PT-416	PT-417	PT-418	PT-419	PT-420	PT-421	PT-422	PT-423	PT-424	PT-425	PT-426	PT-427	PT-428	PT-429	PT-430	PT-431	PT-432	PT-433	PT-434	PT-435	PT-436	PT-437	PT-438	PT-439	PT-440	PT-441	PT-442	PT-443	PT-444	PT-445	PT-446	PT-447	PT-448	PT-449	PT-450	PT-451	PT-452	PT-453	PT-454	PT-455	PT-456	PT-457	PT-458	PT-459	PT-460	PT-461	PT-462	PT-463	PT-464	PT-465	PT-466	PT-467	PT-468	PT-469	PT-470	PT-471	PT-472	PT-473	PT-474	PT-475	PT-476	PT-477	PT-478	PT-479	PT-480	PT-481	PT-482	PT-483	PT-484	PT-485	PT-486	PT-487	PT-488	PT-489	PT-490	PT-491	PT-492	PT-493	PT-494	PT-495	PT-496	PT-497	PT-498	PT-499	PT-500	PT-501	PT-502	PT-503	PT-504	PT-505	PT-506	PT-507	PT-508	PT-509	PT-510	PT-511	PT-512	PT-513	PT-514	PT-515	PT-516	PT-517	PT-518	PT-519	PT-520	PT-521	PT-522	PT-523	PT-524	PT-525	PT-526	PT-527	PT-528	PT-529	PT-530	PT-531	PT-532	PT-533	PT-534	PT-535	PT-536	PT-537	PT-538	PT-539	PT-540	PT-541	PT-542	PT-543	PT-544	PT-545	PT-546	PT-547	PT-548	PT-549	PT-550	PT-551	PT-552	PT-553	PT-554	PT-555	PT-556	PT-557	PT-558	PT-559	PT-560	PT-561	PT-562	PT-563	PT-564	PT-565	PT-566	PT-567	PT-568	PT-569	PT-570	PT-571	PT-572	PT-573	PT-574	PT-575	PT-576	PT-577	PT-578	PT-579	PT-580	PT-581	PT-582	PT-583	PT-584	PT-585	PT-586	PT-587	PT-588	PT-589	PT-590	PT-591	PT-592	PT-593	PT-594	PT-595	PT-596	PT-597	PT-598	PT-599	PT-600	PT-601	PT-602	PT-603	PT-604	PT-605	PT-606	PT-607	PT-608	PT-609	PT-610	PT-611	PT-612	PT-613	PT-614	PT-615	PT-616	PT-617	PT-618	PT-619	PT-620	PT-621	PT-622	PT-623	PT-624	PT-625	PT-626	PT-627	PT-628	PT-629	PT-630	PT-631	PT-632	PT-633	PT-634	PT-635	PT-636	PT-637	PT-638	PT-639	PT-640	PT-641	PT-642	PT-643	PT-644	PT-645	PT-646	PT-647	PT-648	PT-649	PT-650	PT-651	PT-652	PT-653	PT-654	PT-655	PT-656	PT-657	PT-658	PT-659	PT-660	PT-661	PT-662	PT-663	PT-664	PT-665	PT-666	PT-667	PT-668	PT-669	PT-670	PT-671	PT-672	PT-673	PT-674	PT-675	PT-676	PT-677	PT-678	PT-679	PT-680	PT-681	PT-682	PT-683	PT-684	PT-685	PT-686	PT-687	PT-688	PT-689	PT-690	PT-691	PT-692	PT-693	PT-694	PT-695	PT-696	PT-697	PT-698	PT-699	PT-700	PT-701	PT-702	PT-703	PT-704	PT-705	PT-706	PT-707	PT-708	PT-709	PT-710	PT-711	PT-712	PT-713	PT-714	PT-715	PT-716	PT-717	PT-718	PT-719	PT-720	PT-721	PT-722	PT-723	PT-724	PT-725	PT-726	PT-727	PT-728	PT-729	PT-730	PT-731	PT-732	PT-733	PT-734	PT-735	PT-736	PT-737	PT-738	PT-739	PT-740	PT-741	PT-742	PT-743	PT-744	PT-745	PT-746	PT-747	PT-748	PT-749	PT-750	PT-751	PT-752	PT-753	PT-754	PT-755	PT-756	PT-757	PT-758	PT-759	PT-760	PT-761	PT-762	PT-763	PT-764	PT-765	PT-766	PT-767	PT-768	PT-769	PT-770	PT-771	PT-772	PT-773	PT-774	PT-775	PT-776	PT-777	PT-778	PT-779	PT-780	PT-781	PT-782	PT-783	PT-784	PT-785	PT-786	PT-787	PT-788	PT-789	PT-790	PT-791	PT-792	PT-793	PT-794	PT-795	PT-796	PT-797	PT-798	PT-799	PT-800	PT-801	PT-802	PT-803	PT-804	PT-805	PT-806	PT-807	PT-808	PT-809	PT-810	PT-811	PT-812	PT-813	PT-814	PT-815	PT-816	PT-817	PT-818	PT-819	PT-820	PT-821	PT-822	PT-823	PT-824	PT-825	PT-826	PT-827	PT-828	PT-829	PT-830	PT-831	PT-832	PT-833	PT-834	PT-835	PT-836	PT-837	PT-838	PT-839	PT-840	PT-841	PT-842	PT-843	PT-844	PT-845	PT-846	PT-847	PT-848	PT-849	PT-850	PT-851	PT-852	PT-853	PT-854	PT-855	PT-856	PT-857	PT-858	PT-859	PT-860	PT-861	PT-862	PT-863	PT-864	PT-865	PT-866	PT-867	PT-868	PT-869	PT-870	PT-871	PT-872	PT-873	PT-874	PT-875	PT-876	PT-877	PT-878	PT-879	PT-880	PT-881	PT-882	PT-883	PT-884	PT-885	PT-886	PT-887	PT-888	PT-889	PT-890	PT-891	PT-892	PT-893	PT-894	PT-895	PT-896	PT-897	PT-898	PT-899	PT-900	PT-901	PT-902	PT-903	PT-904	PT-905	PT-906	PT-907	PT-908	PT-909	PT-910	PT-911	PT-912	PT-913	PT-914	PT-915	PT-916	PT-917	PT-918	PT-919	PT-920	PT-921	PT-922	PT-923	PT-924	PT-925	PT-926	PT-927	PT-928	PT-929	PT-930	PT-931	PT-932	PT-933	PT-934	PT-935	PT-936	PT-937	PT-938	PT-939	PT-940	PT-941	PT-942	PT-943	PT-944	PT-945	PT-946	PT-947	PT-948	PT-949	PT-950	PT-951	PT-952	PT-953	PT-954	PT-955	PT-956	PT-957	PT-958	PT-959	PT-960	PT-961	PT-962	PT-963	PT-964	PT-965	PT-966	PT-967	PT-968	PT-969	PT-970	PT-971	PT-972	PT-973	PT-974	PT-975	PT-976	PT-977	PT-978	PT-979	PT-980	PT-981	PT-982	PT-983	PT-984	PT-985	PT-986	PT-987	PT-988	PT-989	PT-990	PT-991	PT-992	PT-993	PT-994	PT-995	PT-996	PT-997	PT-998	PT-999	PT-1000	PT-1001	PT-1002	PT-1003	PT-1004	PT-1005	PT-1006	PT-1007	PT-1008	PT-1009	PT-1010	PT-1011	PT-1012	PT-1013	PT-1014	PT-1015	PT-1016	PT-1017	PT-1018	PT-1019	PT-1020	PT-1021	PT-1022	PT-1023	PT-1024	PT-1025	PT-1026	PT-1027	PT-1028	PT-1029	PT-1030	PT-1031	PT-1032	PT-1033	PT-1034	PT-1035	PT-1036	PT-1037	PT-1038	PT-1039	PT-1040	PT-1041	PT-1042	PT-1043	PT-1044	PT-1045	PT-1046	PT-1047	PT-1048	PT-1049	PT-1050	PT-1051	PT-1052	PT-1053	PT-1054	PT-1055	PT-1056	PT-1057	PT-1058	PT-1059	PT-1060	PT-1061	PT-1062	PT-1063	PT-1064	PT-1065	PT-1066	PT-1067	PT-1068	PT-1069	PT-1070	PT-1071	PT-1072	PT-1073	PT-1074	PT-1075	PT-1076	PT-1077	PT-1078	PT-1079	PT-1080	PT-1081	PT-1082	PT-1083	PT-1084	PT-1085	PT-1086	PT-1087	PT-1088	PT-1089	PT-1090	PT-1091	PT-1092	PT-1093	PT-1094	PT-1095	PT-1096	PT-1097	PT-1098	PT-1099	PT-1100	PT-1101	PT-1102	PT-1103	PT-1104	PT-1105	PT-1106	PT-1107	PT-1108	PT-1109	PT-1110	PT-1111	PT-1112	PT-1113	PT-1114	PT-1115	PT-1116	PT-1117	PT-1118	PT-1119	PT-1120	PT-1121	PT-1122	PT-1123	PT-1124	PT-1125	PT-1126	PT-1127	PT-1128	PT-1129	PT-1130	PT-1131	PT-1132	PT-1133	PT-1134	PT-1135	PT-1136	PT-1137	PT-1138	PT-1139	PT-1140	PT-1141	PT-1142	PT-1143	PT-1144	PT-1145	PT-1146	PT-1147	PT-1148	PT-1149	PT-1150	PT-1151	PT-1152	PT-1153	PT-1154	PT-1155	PT-1156	PT-1157	PT-1158	PT-1159	PT-1160	PT-1161	PT-1162	PT-1163	PT-1164	PT-1165	PT-1166	PT-1167	PT-1168	PT-1169	PT-1170	PT-1171	PT-1172	PT-1173	PT-1174	PT-1175	PT-1176	PT-1177	PT-1178	PT-1179	PT-1180	PT-1181	PT-1182	PT-1183	PT-1184	PT-1185	PT-1186

SPECIAL NOTES : PT-8 ASH OUTLET PT-11 EXHAUST IRRECHING
PT-9 CENTER SHAF COOLING AIR EXHAUSTP-12 I. D. FAN INLET/SCRUBBER OUTLET
D 13 SCRUBBER INLET

PAGES REMOVED DURING

EDITORIAL REVIEW

(because quality might affect
further reproduction)

Radian Corporation. Emissions of Metals and Organics
from Municipal Wastewater Sludge Incinerators.
EPA/600/2-91/007. July 1991.

VOLUME II

APPENDIX A

INCINERATOR AND SCRUBBER OPERATING DATA

LPPCP

LOWER POTOMAC POLLUTION CONTROL PLANT COUNTY OF FAIRFAX VIRGINIA
K- BUILDING - INCINERATOR & DAILY FEED LOG

TIME	INCLINE BELT A BELT SCALE	FURN. FEED BELT A BELT SCALE	TRANSFER BELT B BELT SCALE	INCINERATORS #	LOADS DR LINC ASH BIN	ASH ASH BIN	DATE S M D W T F S
11 00		14362	5.80	4	5.80		4/9/87
11 15		14519	1.57/15 MIN		6.28		11-7
11 30		14665	1.46/15 MIN		5.84		
11 45		14773	1.08/15 MIN		4.32		
12 00		14903	(4.8/15 MIN)		5.40		
12 15		15033	1.30/15 MIN		5.20		
12 30		15187	1.54/15 MIN		6.16		
12 45		15324	1.37/15 MIN		5.48		
13 00		15472	1.48/15 MIN		5.92		7-3
13 15		15637	1.65/15 MIN		6.60		
13 30		15756	1.19/15 MIN		4.76		
13 45		15899	1.43/15 MIN		5.72		
14 00		16056	1.57/15 MIN		6.28		
14 15		16205	1.49/15 MIN		5.76		
14 30		16366	1.61/15 MIN		6.44		
14 45		16638	2.72/30 MIN		5.44		
15 00		16766	1.28/15 MIN		5.12		3-11
15 15		16894	1.28/15 MIN		5.12		
15 30		16986	0.92/15 MIN		3.68		
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DATE 04/07/87

RUN # 1 M125

RUN # 2 M125

PLANT LPPCP

TIME	SCRUBBER WATER FLOW		GAS FLOW	
	TOTALIZER READING (GAL x 100)	FLOW (GPM)	TOTALIZER READING (CUBIC FT) (÷ 10)	FLOW (CF3/min)
11:30	578 442	~~1087~~	284,281,900	1967
11:45	578 605	1087		
12:00	578 738	807	284,340,900	2002
12:15	578 859	873		
12:30	578 990	860	284,400,950	1968
12:45	579 119	907		
13:00	579 255	1007	284,460,000	1800
13:15	579 406	713		
13:30	579 513	913	284,519,000	~~1800~~
13:45	579 650	767		
14:00	579 765	1027	284,572,000	2033
14:15	579 919	833		
14:30	580 044	813		
15:00	580 288	973		
15:15	580 434	880	284,694,000	
15:30	~~580 698~~			
15:45	580 698			

A-4

Updated 01/15/89
by ORK196.2 F³/min

THERMOPILE NOT WORKING
 LOWER POTOMAC POLLUTION CONTROL PLANT COUNTY OF FAIRFAX VIRGINIA
 K-2 BUILDING - INCINERATOR 360 DAILY LOG

LPPCP

TIME	TEMPERATURE READINGS										PERCENT	DRAFT	CHECKS	HP	BURNERS				DATE
	1	2	3	4	5	6	7	8	9	10	BA	OXY	FURN	SCRE	A	B	C	D	
09 30	710	535	990	1520	730	210	195	780	145	65	13.6	0.10	✓	25	4	3/4	4	3/4	04/08/87
09 45	710	535	990	1520	730	210	193	782	140	60	14.3	0.10	✓	25	4	3/4	4	3/4	HEARTH 1 TEMP
10 00	698	535	990	1520	740	215	195	783	138	60	14.6	0.10	✓	25	4	3/4	4	3/4	"
10 15	695	519	975	1520	745	210	195	780	140	62	14.3	0.095	✓	25	4	3/4	4	3/4	"
10 30	695	520	970	1518	745	210	190	765	140	60	14.3	0.10	✓	25	4	3/4	4	3/4	"
10 45	695	525	965	1520	745	210	190	765	140	60	14.2	0.10	✓	25	4	3/4	4	3/4	"
11 00	705	515	980	1525	745	210	200	780	140	65	14.3	0.10	✓	25	4	3/4	4	3/4	"
11 15	705	545	1005	1520	725	200	200	780	145	65	14.4	0.10	✓	25	4	3/4	4	3/4	7 CENTER SHAFT OUTLET TEMP
11 30	740	580	1050	1515	730	210	200	820	140	60	14.1	0.12	✓	25	4	3/4	4	3/4	8 FURNACE GAS OUTLET TEMP
11 45	740	—	1090	1520	730	210	200	820	135	60	14.8	0.10	✓	25	4	3/4	4	3/4	9 SCRUBBER INLET TEMP
12 00	720	—	1090	1515	740	210	210	795	140	60	15.1	0.10	✓	25	4	3/4	4	3/4	10 ED FAN INLET TEMP
12 15	710	—	1015	1525	740	210	205	795	140	60	14.6	0.10	✓	25	4	3/4	4	3/4	*LOST SLUDGE FEED
12 30	735	—	1020	1515	740	207	207	815	140	62	14.0	0.10	✓	25	4	3/4	4	3/4	ABOUT 1205 BACK ON AT 12:11
12 45	725	—	1030	1520	745	210	207	815	140	60	14.6	0.10	✓	25	4	3/4	4	3/4	
13 00	720	—	1040	1520	750	210	210	800	140	60	15.2	0.10	✓	25	4	3/4	4	3/4	
13 15	720	—	1020	1520	745	208	208	785	140	65	15.2	0.10	✓	25	4	3/4	4	3/4	RUNNING AT HIGHER FEED RATE
13 30	690	75	960	1521	765	210	205	760	150	65	14.0	0.09	✓	25	4	3/4	4	3/4	> 7.0 TPH. TRENDS.
14 00	700	—	940	1520	820	210	200	760	150	70	13.0	0.08	✓	25	4	3/4	4	3/4	HEARTH 3 TEMP DECREASING
14 15	710	—	975	1520	845	220	200	780	160	65	13.0	0.09	✓	25	4	3/4	4	3/4	HEARTH 4 TEMP INCREASING
14 30	705	—	970	1520	845	230	200	785	150	75	13.4	0.08	✓	25	4	3/4	4	3/4	*PUTTING BACK ON SLUDGE FEED
14 45	705	—	960	1515	845	235	200	765	155	75	12.8	0.09	✓	25	4	3/4	4	3/4	
15 00	710	—	965	1520	875	245	195	880	155	75	12.9	0.085	✓	25	4	3/4	4	3/4	

GAS	GAS 11-7	GAS 7-3	GAS 3-11	OIL	OIL 11-7	OIL 7-3	OIL 3-11
STOP							
START							
TOTAL							

LOWER POTOMAC POLLUTION CONTROL PLANT COUNTY OF FAIRFAX VIRGINIA
K-2 BUILDING - INCINERATOR 364 DAILY LOG

LPCCP

TIME	TEMPERATURE READINGS										PERCENT	DRAFT	CHECKS	WP	BURNERS				DATE
	1	2	3	4	5	6	7	8	9	10	BA	OXY	FURN	SCRB	A	B	C	D	
15 00	710	-	965	1520	895	245	195	880	155	75	12.9	0.085	11.5	✓	25	4	3/4	4	11-7
15 15	710	-	955	1525	885	245	200	780	155	85	12.8	0.09	11.5	✓	25	4	3/4	4	11-7
15 30	710	-	957	1545	895	250	200	785	155	65	12.5	0.09	11.5	✓	25	4	3/4	4	11-7
15 45	705	-	957	1525	885	250	200	790	150	65	13.2	0.09	11.5	✓	25	4	3/4	4	11-7
16 00	710	-	980	1525	805	250	200	785	150	65	13.3	0.09	11.5	✓	25	4	3/4	4	11-7
16 15	705	-	990	1495	760	245	200	790	140	60	15.3	0.095	11.25	✓	25	4	3/4	4	11-7
16 30	690	-	995	1480	730	245	200	785	140	65	15.5	0.095	11.25	✓	25	4	3/4	4	11-7
16 45	680	-	970	1475	710	230	200	780	145	65	15.0	0.10	11.25	✓	25	4	3/4	4	11-7
17 00	700	-	960	1500	740	230	200	750	150	60	13.5	0.11	11.3	✓	25	4	3/4	4	11-7
17 15	680	-	955	1515	750	215	200	760	145	60	14.5	0.10	11.25	✓	25	4	3/4	4	11-7
17 30	680	-	950	1515	760	225	200	760	145	60	14.4	0.10	11.5	✓	25	4	3/4	4	11-7
17 45	700	-	940	1545	790	225	200	800	155	60	13.2	0.095	11.5	✓	25	4	3/4	4	11-7
18 00	730	-	930	1560	815	225	200	840	160	65	12.4	0.09	11.5	✓	25	4	3/4	4	11-7
18 15	750	-	935	1550	810	225	200	860	155	65	12.4	0.095	11.5	✓	25	4	3/4	4	11-7
18 30	745	-	975	1570	770	220	200	845	155	65	13.1	0.085	11.5	✓	25	4	3/4	4	11-7
19 00	747	-	910	1540	805	225	200	850	158	65	12.3	0.09	11.25	✓	25	4	3/4	4	11-7
19 15	760	-	930	1540	815	225	200	870	158	65	12.1	0.09	11.25	✓	25	4	3/4	4	11-7
19 30	760	-	945	1515	975	228	200	870	148	65	12.8	0.09	11.25	✓	25	4	3/4	4	11-7
19 45	760	-	955	1505	745	228	200	870	145	65	13.3	0.09	11.25	✓	25	4	3/4	4	11-7
20 00	762	-	980	1490	730	225	202	865	145	65	13.7	0.095	11.50	✓	25	4	3/4	4	11-7

* Changed vacuum filter

GAS	GAS 11-7	GAS 7-3	GAS 3-11	OIL	OIL 11-7	OIL 7-3	OIL 3-11
STOP							
START							
TOTAL							

Mocking
working

LOWER POTOMAC POLLUTION CONTROL PLANT COUNTY OF FAIRFAX VIRGINIA
K-2 BUILDING - INCINERATOR 3&4 DAILY LOG

5105 L. J. J. H. S.

LPCP

TIME	TEMPERATURE READINGS										PERCENT	DRAFT	CHECKS	WP	BURNERS	DATE
	1	2	3	4	5	6	7	8	9	10						
20 00	762	-	980	1490	730	225	202	865	145	65	13.7	0.095	11.50	✓	✓	04/08/87
20 15	727	-	962	1485	720	225	205	835	142	65	14.1	0.09	11.25	✓	✓	11-7
20 30	720	-	970	1480	720	220	208	830	145	65	14.1	0.095	11.25	✓	✓	
20 45	715	-	980	1475	720	215	205	827	145	60	14.2	0.095	11.25	✓	✓	
21 00	720	-	1005	1460	705	209	202	835	140	60	13.9	0.10	11.25	✓	✓	
21 15	725	-	1005	1440	700	205	202	830	140	60	13.7	0.085	11.25	✓	✓	
21 30	725	-	1015	1500	745	210	205	825	145	60	12.8	0.10	11.50	✓	✓	
21 45	730	-	1000	1500	725	212	202	810	140	60	14.4	0.10	11.50	✓	✓	
22 00	720	-	980	1500	740	210	200	800	140	60	14.2	0.10	11.25	✓	✓	
22 15	720	-	970	1500	750	215	200	807	145	60	13.7	0.10	11.25	✓	✓	
3-11																

GAS	GAS 11-7	GAS 7-3	GAS 3-11	OIL	OIL 11-7	OIL 7-3	OIL 3-11
STOP							
START							
TOTAL							

LPPCP

SHEET 1 OF 3

LOWER POTOMAC POLLUTION CONTROL PLANT COUNTY OF FAIRFAX VIRGINIA										
K- BUILDING - INCINERATOR & DAILY FEED LOG										
TIME	INCLINE BELT # BELT SCALE	FURN. FEED BELT # BELT SCALE	TRANSFER BELT # BELT SCALE	INCINERATORS (TONS/Hr) #	LOADS DR LHC ASH BIN	ASH BIN	DATE S H M T F S			
10:00		25560	2				4/8/87			
09:30		25704	1.44 TONS/15 MIN							
09:45		25867	1.63 TONS/15 MIN							
10:00		26021	1.54 TONS/15 MIN							
10:15		26125	1.04 TONS/15 MIN							
10:30		26243	1.18 TONS/15 MIN							
10:45		26350	1.07 TONS/15 MIN							
11:00		26441	0.91 TONS/15 MIN							
11:15										
11:30		26577	1.36 TONS/15 MIN							
11:45		26706	1.29 TONS/15 MIN							
12:00		26816	1.10 TONS/15 MIN							
12:15		26898	0.82 TONS/15 MIN							
12:30		27002	1.04 TONS/15 MIN							
12:45		27158	1.56 TONS/15 MIN							
13:00		27313	1.55 TONS/15 MIN							
13:15		27422	1.79 TONS/15 MIN							
13:30		27676	1.82 TONS/15 MIN							
13:45		27862	1.86 TONS/15 MIN							
14:00		28039	1.77 TONS/15 MIN							
14:15		28233	1.94 TONS/15 MIN							
14:30		28406	1.13 TONS/15 MIN							
14:45		28585	1.74 TONS/15 MIN							
15:00		28761	1.76 TONS/15 MIN							
BT										

SHEET 2 of 3

K- BUILDING - INCINERATOR & DAILY FEED LOC

[illegible]

DATE 04/08/87

RUN # 3 M125

RUN # 1 Cr+6

PLANT LPCCP

SCRUBBER WATER FLOW
TOTALIZER READING
(GAL x100)

FLOW
(GPM)

TIME

10:00 0930

0945

1000

1015

1030

1045

1100

1115

1130

1145

1200

1215

1230

1245

1300

1315

1330

1345

1400

1415

1430

1445

1500

589829

589944

590077

590217

590340

590475

590610

590742

590868

590998

591130

591269

591400

591533

591667

591790

592060

592188

592326

592452

592584

592695

767

887

933

820

900

900

880

840

860

880

927

873

887

893

820

900

853

920

840

880

740

GAS FLOW
TOTALIZER READING
(CUBIC FT.)

($\div 10$)

FLOW
(FT^3/min)

287,768,500

287,820,900

287,877,000

288,054,300

288,180,100

288,302,500

288,416,900

1947

1870

1970

2097

2040

1907

DATE 04/08/87

SHEET 2 OF 3

PLANT LPPCP

SCRUBBER WATER FLOW

TIME	TOTALIZER READING (GAL x 100)	FLOW (GPM)
15:00	592695	1053
15:15	592853	813
15:30	592975	953
15:45	593118	827
16:00	593242	947
16:15	593384	820
16:30	593507	1027
16:45	593661	773
17:00	593777	900
17:15	593912	1187
17:30	594099	853
17:45	594177	860
18:00	594306	947
18:15	594448	840
18:30	594574	907
18:45	594710	840
19:00	594836	913
19:15	594973	880
19:30	595105	873
19:45	595236	780
20:00	595353	

GAS FLOW	
TOTALIZER READING (FT ³) (÷ 10)	FLOW (FT ³ /MIN)
288,416,900	2012
288,537,600	1718
→ 288,644,300	2207
→ 288,776,700	2750
→ 288,941,700	2502
→ 288,092,800	

DATE 04/08/87

SHEET 3 of 3

PLANT LPPCP

TIME	SCRUBBER WATER FLOW	
	TOTALIZER READING (GAL x 100)	FLOW (GPM)
20:00	595353	997
20:15	595501	893
20:30	595635	880
20:45	595767	993
21:00	595816	740
21:15	596027	1000
21:30	596177	747
21:45	596289	893
22:00	596423	713
22:15	596530	

GAS FLOW	
TOTALIZER READING (FT ³)	FLOW (FT ³ /MIN)
289,091,800	
289,238,000	~~2437~~
289,352,200	~~1983~~
289,382,000	~~1987~~

Updated 01/15/89
by DRK210.9 Ft³/min

SHEET 1 OF 2
LPRCP

LOWER POTOMAC POLLUTION CONTROL PLANT COUNTY OF FAIRFAX VIRGINIA
K-2 BUILDING - INCINERATOR 300 DAILY LOG

TIME	TEMPERATURE READINGS										PERCENT	DRAFT	CHECKS	UP	BURNERS				DATE
	1	2	3	4	5	6	7	8	9	10					A	B	C	D	
09 00	725	-	940	1480	760	230	190	790	160	70	13.6	0.10	✓	25	3/4	3/4	3/4	3/4	04/09/89
09 45	755	-	945	1515	815	230	190	860	160	65	13.2	0.10	✓	25	3/4	3/4	3/4	3/4	
10 00	750	-	935	1515	805	230	190	855	160	68	13.3	0.095	✓	25	3/4	3/4	3/4	3/4	
10 15	775	-	920	1520	850	230	190	860	165	70	12.5	0.09	✓	25	3/4	3/4	3/4	3/4	
10 30	765	-	920	1520	950	235	190	870	170	75	11.5	0.095	✓	25	3/4	3/4	3/4	3/4	
10 45	765	-	945	1520	890	253	190	865	175	65	12.6	0.10	✓	25	3/4	3/4	3/4	3/4	
11 00	750	-	940	1520	840	180	190	850	160	70	13.6	0.10	✓	25	3/4	3/4	3/4	3/4	
11 15	757	-	935	1520	800	270	200	855	155	65	14.1	0.10	✓	25	3/4	3/4	3/4	3/4	
11 30	750	-	925	1520	770	250	195	845	155	65	14.2	0.10	✓	25	3/4	3/4	3/4	3/4	
11 45	755	-	925	1520	780	240	200	850	155	70	14.0	0.10	✓	25	3/4	3/4	3/4	3/4	
12 00	760	-	940	1520	775	240	200	855	155	70	13.8	0.10	✓	25	3/4	3/4	3/4	3/4	
12 15	762	-	1026	1520	770	235	200	860	155	70	14.4	0.12	✓	25	3/4	3/4	3/4	3/4	
12 30	775	-	1085	1520	770	230	205	865	155	67	14.1	0.105	✓	25	3/4	3/4	3/4	3/4	
12 45	775	-	1120	1520	770	235	205	870	150	65	14.9	0.10	✓	25	3/4	3/4	3/4	3/4	
13 00	785	-	1095	1520	770	215	210	870	155	65	14.3	0.105	✓	25	3/4	3/4	3/4	3/4	
13 15	795	-	1115	1520	770	220	215	905	155	65	13.9	0.11	✓	25	3/4	3/4	3/4	3/4	
13 30	790	-	1300	1525	770	215	215	885	155	65	14.8	0.12	✓	25	3/4	3/4	3/4	3/4	
13 45	790	-	1260	1520	770	215	215	860	147	70	14.8	0.12	✓	25	3/4	3/4	3/4	3/4	
14 00	790	-	1165	1520	780	215	210	885	150	65	13.6	0.10	✓	25	3/4	3/4	3/4	3/4	
14 15																			
14 30	785	-	1245	1520	770	210	210	870	145	65	15.4	0.115	✓	25	3/4	3/4	3/4	3/4	
14 45	760	-	1205	1520	765	210	210	845	145	65	15.7	0.115	✓	25	3/4	3/4	3/4	3/4	
15 00	740	-	1145	1520	760	210	210	810	145	65	15.1	0.10	✓	25	3/4	3/4	3/4	3/4	

← INCREASED LIME FEED
TO ATTEMPT TO INCREASE
SLUDGE FEED RATE.
SLUDGE IS WETTER THAN
USUAL.

← HAVING LIME FEED
PROBLEMS
← SLUDGE IS WET
LOW FEED RATES

STOP START TOTAL	GAS	GAS 11-7	GAS 7-3	GAS 3-11	OIL	OIL 11-7	OIL 7-3	OIL 3-11

SECONDARY EFFLUENT SCRUBBER WATER ONLY

LOWER POTOMAC POLLUTION CONTROL PLANT COUNTY OF FAIRFAX VIRGINIA									
K- BUILDING - INCINERATOR & DAILY FEED LOG									
TIME	INCLINE BELT # BELT SCALE	TURN. FEED BELT # BELT SCALE	INCINERATOR # (TONS/HR)	LOADS BP LHC ASH BIN	ASH BIN	DATE			
		39825		4		04/09/87 SMT W P S			
00		40326	5.01 TONS / 15 MIN						
45		40510	1.84 TONS / 15 MIN						
00		40645	1.35 TONS / 15 MIN						
15		40774	1.29 TONS / 15 MIN						
30		40920	1.46 TONS / 15 MIN						
45		41054	1.34 TONS / 15 MIN						
00		41194	1.40 TONS / 15 MIN						
15									
30		41316	1.22 TONS / 15 MIN						
45		41430	1.14 TONS / 15 MIN						
00		41546	1.16 TONS / 15 MIN						
15		41689	1.43 TONS / 15 MIN						
30		41806	1.17 TONS / 15 MIN						
45		41910	1.09 TONS / 15 MIN						
00		42000	0.90 TONS / 15 MIN						
15		42097	0.97 TONS / 15 MIN						
30		42181	0.84 TONS / 15 MIN						
45		42273	0.92 TONS / 15 MIN						
00		42403	1.30 TONS / 15 MIN						
15		42580	1.77 TONS / 15 MIN						
30		42732	1.52 TONS / 15 MIN						
45		42920	1.88 TONS / 15 MIN						
00		43145	2.25 TONS / 15 MIN						
DT									

← BEGAN VOST /
SEMI-VOST RUN

SHEET 2 OF 2

LPDCP

LOWER PUTOMAC POLLUTION CONTROL PLANT COUNTY OF FAIRFAX VIRGINIA
K- BUILDING - INCINERATOR & DAILY FEED LOC

TIME	INCLINE BELT # BELT SCALE	FURN. FEED BELT # 5 BELT SCALE	TRANSFER BELT # 8 BELT SCALE	INCINERATORS (TONS/HR)		LOADS		ASH	DATE S N T W T F S
				#	# 4	BP LHC	ASH BIN		
15:00		43145							04/09/87 11-7
15:15		43349	2.04 TONS						
15:30									
15:45									
16:00		43803	4.54 TONS	15 MIN	6.05				
16:15		44016	2.13 TONS	15 MIN	8.52				
16:30		44186	1.70 TONS	15 MIN	6.80				
16:45		44363	1.77 TONS	15 MIN	7.08				
17:00		44539	1.76 TONS	15 MIN	7.04				
17:15		44729	1.90 TONS	15 MIN	7.60				
17:30		44910	1.81 TONS	15 MIN	7.24				
17:45		45080	1.50 TONS	15 MIN	6.00				
18:00		45196	1.36 TONS	15 MIN	5.44				
18:15		45367	1.71 TONS	15 MIN	6.84				
18:30		45530	1.63 TONS	15 MIN	6.52				

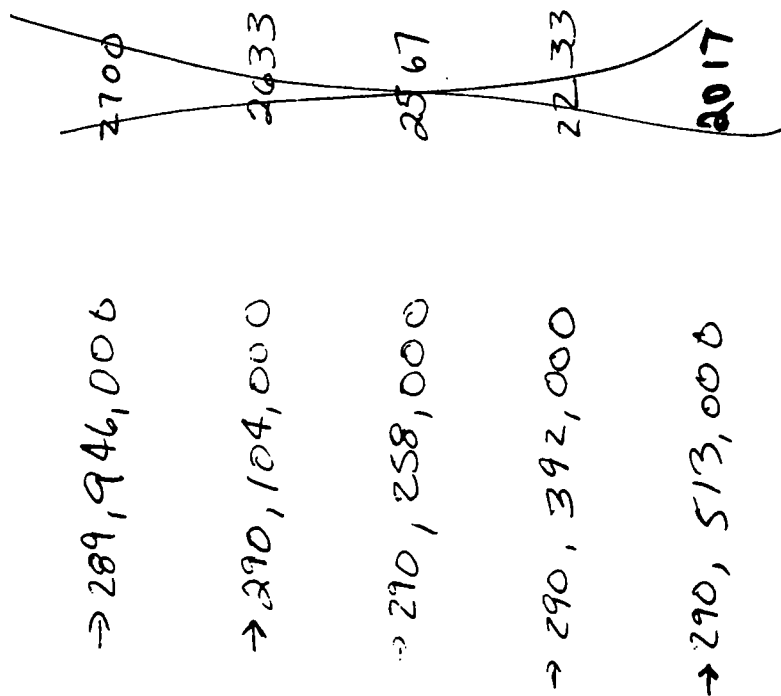
DATE 04/09/87

SECONDARY EFFLUENT SCRUBBER WATER ONLY

SHEET 1 OF 2

PLANT LPPCP

TIME	SCRUBBER WATER		FLOW	
	TOTALIZER READING (GALX100)	FLOW (GPM)	TOTALIZER READING (FT ³)	FLOW (FT ³ /MIN)
0945	602622	860	289,784,000	
1000	602751	813		
1015	602888	880		
1030	603020	873		
1045	603151	853		
1100	603279	900		
1115	603414	860		
1130	603543	907		
1145	603679	853		
1200	603807	967		
1215	603952	800		
1230	604072	887		
1245	604205	867		
1300	604335	873		
1315	604466	933		
1330	604606	840		
1345	604732	900		
1400	604867	867		
1415	604997	913		
1430	605134	867		
1445	605264	867		
1500	605394			



DATE 04/09/87

PLANT LPPCP

TIME	SCRUBBER WATER FLOW	
	TOTALIZER READING (GAL X100)	FLOW (GPM)
1500	605394	893
1515	605528	
1530		
1545		
1600		
1615	605917	864
1630	606060	953
1645	606190	867
1700	606323	887
1715	606454	873
1730	606587	887
1745	606718	873
1800	606857	927
1815	606983	840
1830	607118	900
	607240	813

GAS FLOW	
TOTALIZER READING (FT ³) (÷10)	FLOW (FT ³ /MIN)
290,513,000	
→ 290,655,000	~~2367~~
→ 290,795,000	2333
→ 290,939,000	~~2400~~
→ 290,013,000	~~2467~~

Updated by DRK
01/15/89

241.0 ft³/min

LOWER POTOMAC POLLUTION CONTROL PLANT COUNTY OF FAIRFAX VIRGINIA
K-2 BUILDING - INCINERATOR 3&4 DAILY LOG

TIME	TEMPERATURE READINGS										PERCENT		DRAFT	CHECKS	WP	BURNERS			DATE S M T W T F S
	1	2	3	4	5	6	7	8	9	10	RA	OXY				A	B	C	
10 00	760	760	1010	1520	790	240	210	840	150	70	14.0	0.12	11.3	✓	25	3/4	3/4	3/4	04/10/87
10 30	795	-	1085	1540	790	235	215	885	145	70	14.2	0.13	11.25	✓	25	3/4	3/4	3/4	11-7
10 45	785	-	1085	1535	785	235	215	880	145	65	14.3	0.115	11.25	✓	25	3/4	3/4	3/4	
11 00	760	-	1030	1520	780	240	220	810	145	70	14.4	0.14	11.3	✓	25	3/4	3/4	3/4	
11 15	785	-	1010	1515	790	235	220	880	150	70	13.3	0.105	11.25	✓	25	3/4	3/4	3/4	
11 30	775	-	1025	1515	780	230	215	845	140	65	14.1	0.13	11.25	✓	25	3/4	3/4	3/4	
11 45	770	-	1020	1515	775	235	215	840	145	65	13.9	0.12	11.25	✓	25	3/4	3/4	3/4	
12 00	760	-	1020	1515	770	235	215	840	145	65	14.0	0.12	11.25	✓	25	3/4	3/4	3/4	
12 15	765	-	1020	1515	775	235	215	845	145	65	13.8	0.12	11.25	✓	25	3/4	3/4	3/4	
12 30	762	-	1022	1515	770	235	215	835	145	65	13.8	0.12	11.25	✓	25	3/4	3/4	3/4	
12 45	765	-	1015	1515	790	235	215	840	145	65	13.4	0.12	11.25	✓	25	3/4	3/4	3/4	
13 00	765	-	1020	1515	805	235	215	840	145	65	13.6	0.125	11.25	✓	25	3/4	3/4	3/4	
13 15	765	-	1025	1515	815	235	215	835	145	65	13.5	0.12	11.25	✓	25	3/4	3/4	3/4	
13 30	765	-	1025	1515	805	240	213	830	145	65	13.8	0.145	11.25	✓	25	3/4	3/4	3/4	
13 45	762	-	1025	1515	795	235	210	830	145	65	13.7	0.12	11.25	✓	25	3/4	3/4	3/4	
14 00	760	-	1020	1510	800	240	220	830	150	65					25	3/4	3/4	3/4	
14 15	762	-	1025	1515	805	235	210	830	145	65	13.5	0.12	11.25	✓	25	3/4	3/4	3/4	
14 30	765	-	1025	1515	815	240	210	835	145	65	13.4	0.12	11.25	✓	25	3/4	3/4	3/4	
14 45					0														
15 00	765	-	1025	1510	805	245	210	825	140	65	13.6	0.12	11.25	✓	25	3/4	3/4	3/4	
15 15	760	-	1020	1510	780	240	210	838	140	65	13.8	0.12	11.25	✓	25	3/4	3/4	3/4	
15 30	765	-	1025	1515	770	240	210	840	140	65	14.0	0.11	11.25	✓	25	3/4	3/4	3/4	
15 45	780	-	1040	1510	760	235	210	845	140	65	13.8	0.11	11.25	✓	25	3/4	3/4	3/4	
16 00	780	-	1020	1510	760	235	215	845	140	65	13.9	0.11	11.25	✓	25	3/4	3/4	3/4	

ALL POINTS SHOULD
BE 4/4. 4 BURNERS ON
HEARTH 2 + 4 ON
HEARTH 4.

7-3

3-11

ALL POINTS SHOULD
BE 4/4.4 BURNERSON
HEARTH 2 + 4 ON
HEARTH 4.

7-3

3-11

STOP START TOTAL	GAS	GAS 11-7	GAS 7-3	GAS 3-11	OIL	OIL 11-7	OIL 7-3	OIL 3-11

LOWER POTOMAC POLLUTION CONTROL PLANT COUNTY OF FAIRFAX VIRGINIA
K-2 BUILDING - INCINERATOR 364 DAILY LOG

	TEMPERATURE READINGS										PERCENT BA	OXY	DRAFT FURN	CHECKS SCHELE C	WP	BURNERS				DATE S M T W T F S
	1	2	3	4	5	6	7	8	9	10						A	B	C	D	
16 00																				4/10/87
16 15	775	-	1000	1510	765	235	215	860	140	60	13.8	0.105	11.25	✓		4/4	4/4	4/4	4/4	
16 30	805	-	1110	1510	780	232	210	875	140	60	13.5	0.11	11.25	✓		4/4	4/4	4/4	4/4	
16 45	805	-	1180	1515	765	230	210	890	140	60	14.6	0.11	11.25	✓		4/4	4/4	4/4	4/4	
17 00	805	-	1285	1510	765	230	210	875	135	60	14.4	0.11	11.25	✓		4/4	4/4	4/4	4/4	
17 15	805	-	1310	1450	735	225	210	865	130	55	16.3	0.12	11.25	✓		4/4	4/4	4/4	4/4	
17 30	785	-	1180	1470	735	225	220	840	130	55	15.0	0.12	11.25	✓		4/4	4/4	4/4	4/4	
17 45	785	-	1085	1515	760	225	218	825	130	60	15.2	0.12	11.25	✓		4/4	4/4	4/4	4/4	
18 00	765	-	1020	1512	760	225	215	825	138	60	14.0	0.10	11.25	✓		4/4	4/4	4/4	4/4	
18 15	775	-	1015	1560	805	225	210	845	140	60	13.8	0.11	11.25	✓		4/4	4/4	4/4	4/4	
18 30	765	-	1005	1560	800	225	210	825	138	55	14.1	0.15	11.25	✓		4/4	4/4	4/4	4/4	
18 45	765	-	990	1560	805	225	210	840	140	58	13.2	0.10	11.25	✓		4/4	4/4	4/4	4/4	
19 00	765	-	970	1560	820	230	210	860	145	60	13.2	0.10	11.25	✓		4/4	4/4	4/4	4/4	
19 15	775	-	995	1560	815	235	210	845	140	60	13.3	0.10	11.25	✓		4/4	4/4	4/4	4/4	
19 30	765	-	990	1515	770	235	210	825	140	60	14.3	0.15	11.25	✓		4/4	4/4	4/4	4/4	
19 45	760	-	992	1515	770	240	205	822	140	60	14.3	0.10	11.25	✓		4/4	4/4	4/4	4/4	
20 00	760	-	990	1510	762	235	207	833	140	60	14.3	0.10	11.25	✓		4/4	4/4	4/4	4/4	
20 15	760	-	990	1510	762	230	207	825	138	60	14.3	0.10	11.25	✓		4/4	4/4	4/4	4/4	
20 30	760	-	990	1510	762	227	205	822	138	60	14.3	0.10	11.25	✓		4/4	4/4	4/4	4/4	
10																				

STOP
START

GAS

GAS 11-7

GAS 7-3

GAS 3-11

OIL

OIL 11-7

OIL 7-3

OIL 3-11

SHEET 1 OF 2

LOWER POTOMAC POLLUTION CONTROL PLANT COUNTY OF FAIRFAX VIRGINIA
K- BUILDING - INCINERATOR & DAILY FEED LOG

TIME	INCLINE BELT # BELT SCALE	FURN. FEED BELT # BELT SCALE	TRANSFER BELT # BELT SCALE	(TONS/HR) INCINERATORS	LOADS BP LHC ASH BIN	ASH	DATE 04/10/87 S N T W T O S 11-7
10 00		55542					
10 30		55827	2.85 TONS/30 MIN	5.70			
10 45		55977	1.50 TONS/15 MIN	6.00			
11 00		56132	1.55 TONS/15 MIN	6.20			
11 15		56272	1.60 TONS/15 MIN	6.40			
11 30		56450	1.58 TONS/15 MIN	6.32			
11 45		56617	1.60 TONS/15 MIN	6.40			
12 00		56777	1.60 TONS/15 MIN	6.40			
12 15		56950	1.73 TONS/15 MIN	6.92			
12 30		57113	1.63 TONS/15 MIN	6.52			7-3
12 45		57286	1.73 TONS/15 MIN	6.92			
13 00		57472	1.86 TONS/15 MIN	7.44			
13 15		57643	1.71 TONS/15 MIN	6.84			
13 30		57806	1.63 TONS/15 MIN	6.52			
13 45		57974	1.68 TONS/15 MIN	6.72			
14 00		58150	1.76 TONS/15 MIN	7.04			
14 15		58327	1.77 TONS/15 MIN	7.08			3-11
14 30		58460	1.33 TONS/15 MIN	5.32			
14 45		58592					
15 00		58742	2.82 TONS/30 MIN	5.64			
15 15		58879	1.37 TONS/15 MIN	5.84			
15 30		59009	1.30 TONS/15 MIN	5.20			
15 45		59132	1.23 TONS/15 MIN	4.92			
16 00		59267	1.95 TONS/15 MIN	5.40			
DT							

SHEET 2 OF 2

LOWER POTOMAC POLLUTION CONTROL PLANT COUNTY OF FAIRFAX VIRGINIA
K- BUILDING - INCINERATOR & DAILY FEED LOG

TIME	INCLINE BELT # BELT SCALE	FURN. FEED BELT # BELT SCALE	TRANSFER BELT # BELT SCALE	INCINERATORS (TONS/HR) # # 4	LOADS BP LHC ASH BIN	ASH BIN	DATE S N T W T F S
16 00		59267					04/10/87
16 15		59375	1.08 TONS/15 MIN	4.32			
16 30		59476	1.01 TONS/15 MIN	4.04			
16 45		59607	1.31 TONS/15 MIN	5.24			
17 00		59760	1.53 TONS/15 MIN	6.17			
17 15		59915	1.55 TONS/15 MIN	6.20			
17 30		60090	1.75 TONS/15 MIN	7.00			
17 45		60268	1.78 TONS/15 MIN	7.12			
18 00		60415	1.47 TONS/15 MIN	5.88			
18 15		60578	1.63 TONS/15 MIN	6.52			
18 30		60739	1.61 TONS/15 MIN	6.44			
18 45		60879	1.40 TONS/15 MIN	5.60			
19 00		61021	1.42 TONS/15 MIN	5.68			
19 15		61156	1.35 TONS/15 MIN	5.40			
19 30		61286	1.30 TONS/15 MIN	5.20			
19 45		61432	1.46 TONS/15 MIN	5.84			
20 00		61552	1.20 TONS/15 MIN	4.80			
20 15		61687	1.35 TONS/15 MIN	5.40			
20 30		61805	1.18 TONS/15 MIN	4.72			
20 45							
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DATE 04/10/86

PLANT LPPCP

SHEET 1 OF 2

TIME	SCRUBBER WATER FLOW		GAS FLOW	
	TOTALIZER READING (GAL X 100)	TOTAL FLOW (GPM)	PRESCRUBBER FLOW (GPM)	TOTALIZER READING (CUBIC FT)
10:30	614873	740	69.0	→ 193,210,000
10:45	614984	767	69.0	
11:00	615099	787	69.0	→ 193,526,000
11:15	615217	780	68.0	
11:30	615334	840	69.0	→ 193,436,000
11:45	615460	707	67.0	
12:00	615566	813	69.2	→ 193,540,000
12:15	615688	800	69.0	
12:30	615808	767	68.7	→ 193,649,000
12:45	615923	773	67.4	
13:00	616039	813	68.0	→ 193,762,000
13:15	616161	773	68.0	
13:30	616277	767	68.9	
13:45	616392	773	69.2	
14:00	616508	787	68.5	
14:15	616626	773	70.5	
14:30	616742	823	69.5	
14:45	616989	707	68.1	
15:00	617095	800	68.5	
15:15	617215	800	67.9	
15:30	617335	753	68.5	
15:45	617448			
16:00				

1,817
1,833
1733
1817

DATE 04/10/87

SHEET 2 OF 2

PLANT LPCCP

TIME	SCRUBBER WATER		FLOW	
	TOTALIZER READING (GAL x 100)	TOTAL FLOW (GPM)	PRE-SCRUBBER FLOW (GPM)	
1600	617448	800	68.5	
1615	617568	787	69.3	
1630	617686	760	67.9	
1645	617800	787	71.0	
1700	617918	747	68.4	
1715	618030	773	70.3	
1730	618146	847	70.1	
1745	618273	720	69.6	
1800	618381	767	69.5	
1815	618496	813	72.6	
1830	618612	767	70.3	
1845	618733	760	69.7	
1900	618847	780	68.5	
1915	618964	773	66.3	
1930	619080	767	67.7	
1945	619195	760	66.4	
2000	619309	873	67.6	
2015	619440	687	68.3	
2030	619543		68.4	

GAS FLOW	
TOTALIZER READING (CUBIC FT)	FLOW (FT ³ /MIN)

193,762,000

→ 193,888,000

→ 194,015,000

→ 194,168,000

→ 194,305,000

→ 194,375,000

2100
2117
2550
2283
1167

Updated by DRK
on 01/15/89203.2 FT³/min

**LOWER POTOMAC POLLUTION CONTROL PLANT COUNTY OF FAIRFAX VIRGINIA
K-2 BUILDING - INCINERATOR 364 DAILY LOG**

TEMPERATURE READINGS											PERCENT		DRAFT	CHECKS	HP	BURNERS				DATE														
TIME		1	2	3	4	5	6	7	8	9	10	RA	OXY	FURN	SCRB	SCF	C	A	B	C	D	S	M	T	W	T	F	D						
09	45	795	-	1150	1480	735	215	210	830	150	70	15.4	0.13	11.0	✓	✓	✓	25	9/4	9/4	9/4	9/4	04/11/87						11-7					
10	00	800	-	1100	1480	730	218	218	870	155	70	14.6	0.10	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
10	15	825	-	1020	1480	730	218	218	910	158	70	13.7	0.10	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
10	30	815	-	1020	1480	735	220	220	910	155	75	14.6	.105	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
10	45	820	-	1060	1480	735	220	220	905	155	75	14.5	.11	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4							7-3					
11	00	810	-	1035	1480	740	220	220	890	155	75	14.6	.10	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
11	15	810	-	990	1480	740	225	220	880	158	75	14.0	.10	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
11	30	805	-	990	1480	738	225	215	883	160	75	13.6	.10	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
11	45	810	-	1020	1480	740	225	215	890	160	75	14.0	.10	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4							3-11					
12	00	810	-	1055	1480	750	225	215	895	160	70	12.9	.10	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
12	15	-	-	1070	1475	750	230	215	895	155	70	12.9	.10	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
12	30	815	-	1070	1470	740	240	210	898	155	65	12.7	.12	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
13	00	800	-	1070	1470	740	240	210	898	155	65	12.7	.12	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
13	15	815	-	1080	1470	775	230	215	900	155	65	13.1	.12	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
13	30	825	-	1115	1480	735	230	218	900	150	65	13.0	.12	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
13	45	803	-	1140	1480	720	230	218	895	145	65	14.7	.14	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
14	00	780	-	1080	1480	725	230	218	835	150	65	14.2	.12	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
14	15	800	-	1060	1475	725	225	210	865	150	65	13.4	.12	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
14	30	800	-	1060	1470	725	225	210	880	145	65	13.1	.11	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
14	45	800	-	1075	1470	725	225	210	880	145	60	13.6	.12	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
15	00	790	-	1095	1470	715	225	210	840	140	60	14.2	.13	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
15	15	790	-	1060	1470	720	215	210	905	145	60	13.9	.11	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
15	30	795	-	1060	1470	720	225	210	880	145	65	13.4	.11	11.25	✓	✓	✓	25	9/4	9/4	9/4	9/4												
STOP		GAS 11-7										GAS 3-11		OIL		OIL 11-7		OIL 7-3		OIL 3-11														
START																																		
TOTAL																																		

LOWER POTOMAC POLLUTION CONTROL PLANT COUNTY OF FAIRFAX VIRGINIA
K-2 BUILDING - INCINERATOR 3&4 DAILY LOG

TIME	TEMPERATURE READINGS										PERCENT		DRAFT	CHECKS	HP	BURNERS				DATE S M T W T F S	
	1	2	3	4	5	6	7	8	9	10	BA	OXY				A	B	C	D		
1530	795	1060	1470	1200	225	210	880	145	65		13.4	.11	✓	✓	25	9/4	9/4	9/4	9/4	11-7	
1545	795	-	1095	1470	715	220	215	860	140	60	14.4	.12	✓	✓	25	9/4	9/4	9/4	9/4		
1600	805	-	1160	1470	715	218	208	845	140	60	14.2	.13	✓	✓	25	9/4	9/4	9/4	9/4		
1615	780	-	1140	1475	720	220	210	830	135	60	14.8	.13	✓	✓	25	9/4	9/4	9/4	9/4		
1630	775	-	1060	1470	720	220	210	830	140	60	14.1	.11	✓	✓	25	9/4	9/4	9/4	9/4		
1645	802	-	1040	1475	720	220	210	880	140	60	13.4	.10	✓	✓	25	9/4	9/4	9/4	9/4		
1700	710	-	970	1500	660	160	160	700	130	70	16.7										
1700	810	-	1080	1450	730	210	210	900	140	60	13.2	.15	✓	✓	25	9/4	9/4	9/4	9/4		
1715	820	-	1380	1470	710	220	220	945	130	55	14.7	.12	✓	✓	25	9/4	9/4	9/4	9/4		
1730	830	-	1355	1470	715	220	215	905	130	55	15.0	.12	✓	✓	25	9/4	9/4	9/4	9/4		
1745	805	-	1350	1470	710	220	220	1045	130	60	14.3	.12	✓	✓	25	9/4	9/4	9/4	9/4		
1800	895	-	1290	1470	710	220	220	980	125	55	15.8	.12	✓	✓	25	9/4	9/4	9/4	9/4		
1815	830	-	1260	1470	710	220	220	910	125	55	16.0	.13	✓	✓	25	9/4	9/4	9/4	9/4		
1830	800	-	1230	1470	705	215	210	860	125	55	15.9	.12	✓	✓	25	9/4	9/4	9/4	9/4		
1845	780	-	1150	1470	680	220	210	825	130	55	16.0	.12	✓	✓	25	9/4	9/4	9/4	9/4		
1900	780	-	1260	1470	680	210	210	820	125	55	15.6	.12	✓	✓	25	9/4	9/4	9/4	9/4		
1915	780	-	1205	1425	680	210	210	815	130	60	15.5	.125	✓	✓	25	9/4	9/4	9/4	9/4		
1930	770	-	1050	1425	685	205	205	870	140	60	14.0	.10	✓	✓	25	9/4	9/4	9/4	9/4		
1945	720	-	1005	1425	690	210	205	1065	140	60	13.1	.13	✓	✓	25	9/4	9/4	9/4	9/4		
2000	870	-	1225	1425	680	210	205	1000	120	55	15.6	.125	✓	✓	25	9/4	9/4	9/4	9/4		

SHEET 1 OF 2

LOWER POTOMAC POLLUTION CONTROL PLANT COUNTY OF FAIRFAX VIRGINIA									
K- BUILDING - INCINERATOR & DAILY FEED LOG									
TIME	INCLINE BELT # BELT SCALE	FURN. FEED BELT # BELT SCALE	TRANSFER BELT # BELT SCALE	INCINERATORS (TONS/HR)		LOADS BP LHC ASH BIN	ASH BIN	DATE S M T W T F S	
				#	#				
09 45		67724						09/11/87	11-7
10 00		67888	1.64 TONS / 15 MIN		6.56				
10 15		68025	1.37 TONS / 15 MIN		5.48				
10 30		68180	1.55 TONS / 15 MIN		6.20				
10 45		68369	1.89 TONS / 15 MIN		7.56				
11 00		68545	1.76 TONS / 15 MIN		7.04				
11 15		68723	1.80 TONS / 15 MIN		7.20				
11 30		68912	1.87 TONS / 15 MIN		7.48				
11 45		69116	2.04 TONS / 15 MIN		8.16				7-3
12 00		69320	2.07 TONS / 15 MIN		8.28				
12 15									
12 30		69674	3.54 TONS / 30 MIN		7.08				
12 45									
13 00		70015	3.91 TONS / 30 MIN		6.82				
13 15		70181	1.66 TONS / 15 MIN		6.64				
13 30		70348	1.67 TONS / 15 MIN		6.68				
13 45		70505	1.57 TONS / 15 MIN						3-11
14 00		70662	1.57 TONS / 15 MIN		6.28				
14 15		70822	1.60 TONS / 15 MIN		6.90				
14 30		70987	1.65 TONS / 15 MIN		6.60				
14 45		71140	1.53 TONS / 15 MIN		6.12				
15 00		71286	1.46 TONS / 15 MIN		5.84				
15 15		71431	1.45 TONS / 15 MIN		5.80				
15 30		71566	1.35 TONS / 15 MIN		5.40				
BT									

SHEET 2 OF 2

LOWER POTOMAC POLLUTION CONTROL PLANT COUNTY OF FAIRFAX VIRGINIA									
K- BUILDING - INCINERATOR & DAILY FEED LOG									
TIME	INCLINE BELT # BELT SCALE	FURN. FEED BELT # BELT SCALE	TRANSFER BELT # BELT SCALE	INCINERATORS (TONS/HR) #	LOADS BP LHC ASH BIN	ASH BIN	DATE S N T W T F S		
15 30		71566					04/11/87	11-7	
15 45		71700	1.34 TONS/15 MIN						
16 00		71839	1.39 TONS/15 MIN						
16 15		71988	1.49 TONS/15 MIN						
16 30		72083	.95 TONS/15 MIN						
16 45		72103	.30 TONS/15 MIN						
17 00		72128	.25 TONS/15 MIN						
17 15		72154	.76 TONS/15 MIN						
17 30		72173	.19 TONS/15 MIN						
17 45		72240	.67 TONS/15 MIN						
18 00		72383	1.13 TONS/15 MIN						
18 15		72534	1.51 TONS/15 MIN						
18 30		72602	1.18 TONS/15 MIN						
18 45		72626	1.44 TONS/15 MIN						
19 00		72661	0.35 TONS/15 MIN						
19 15		72875	0.14 TONS/15 MIN						
19 30		72884	0.09 TONS/15 MIN						
19 45		72993	1.09 TONS/15 MIN						
20 00		73094	1.01 TONS/15 MIN						
DT									

DATE 04/11/87

PLANT LPPCP

TIME	SCRUBBER WATER		FLOW	
	TOTALIZER READING (GALX100)	TOTAL FLOW (GPM)	PRESSURE	FLOW (GPM)
0945	625112			68.0
1000	625231	793		68.5
1015	625358	847		70.3
1030	625483	833		69.4
1045	625608	833		69.6
1100	625732	827		70.3
1115	625859	847		68.4
1130	625979	800		66.8
1145	626116	1313 ?		68.3
1200	626238	813		66.4
1215				
1230	626479	803		68.3
1245				
1300	626730	837		68.0
1315	626858	853		69.3
1330	626981	820		68.5
1345	627102	853		69.4
1400	627232	820		70.3
1415	627355	820		68.1
1430	627479	827		67.8
1445	627609	867		69.0
1500	627721	747		67.8
1515	627857	907		68.0
1530	627977	800		67.4

GAS FLOW	
TOTALIZER READING (CUBIC FT) (x10)	FLOW (FT ³ /MIN)
→ 196,177,000	2675
→ 196,337,500	2200
→ 196,590,000	2354
→ 196,620,000	2104
→ 196,759,000	2550
→ 196,867,000	2067

DATE 04/11/87

PLANT LPPCP

TIME	SCRUBBER WATER FLOW	
	TOTALIZER READING (GAL x 100)	TOTAL FLOW (GPM)
1530	627977	800
1545	628100	825
1600	628230	867
1615	628354	827
1630	628477	820
1645	628602	833
1700	628727	833
1715	628851	827
1730	628975	827
1745	629100	901
1800	629229	787
1815	629355	840
1830	629484	873
1845	629606	800
1900	629730	827
1915	629858	853
1930	629981	820
1945	630108	847
2000	630239	873

GAS FLOW	
TOTALIZER READING (CUBIC FT.) (÷10)	FLOW (FT ³ /MIN)
→ 196,995,000	2133
→ 197,0123,000	2133
→ 197,240,000	1950
→ 197,360,000	2000
→ 197,483,000	2050

Updated by DRK
on 01/15/89

217.7 ft³/min

SHEET 1 OF 1

LOWER POTOMAC POLLUTION CONTROL PLANT COUNTY OF FAIRFAX VIRGINIA
K-2 BUILDING - INCINERATOR 3&4 DAILY LOG

DRK

TIME	TEMPERATURE READINGS										PERCENT	DRAFT	CHECKS	WP	BURNERS				DATE	S M T W T F S
	1	2	3	4	5	6	7	8	9	10	RA	OXY	FURN	SCR	A	B	C	D		
11 00	740	-	1280	1500	760	225	220	830	155	70	15.3	12	11.25	✓	25	9/4	9/4	3/4	04/12/87	
11 15	760	-	1210	1510	750	220	220	835	155	70	15.0	12	11.25	✓	25	9/4	9/4	3/4		
11 30	775	-	1235	1510	750	225	220	830	155	70	14.5	12	11.25	✓	25	9/4	9/4	3/4		
11 45	780	-	1260	1510	770	220	220	830	160	70	14.4	12	11.25	✓	25	9/4	9/4	3/4		
12 00	750	-	1280	1500	760	225	225	820	155	70	14.5	11	11.25	✓	25	9/4	9/4	3/4		
12 15	765	-	1120	1515	760	225	220	820	150	68	14.3	11	11.25	✓	25	9/4	9/4	3/4		
12 30	765	-	1110	1510	765	225	225	820	155	70	14.2	10	11.25	✓	25	9/4	9/4	3/4		
12 45	760	-	1080	1500	755	225	220	815	150	65	14.2	10	11.25	✓	25	9/4	9/4	3/4		
13 00	750	-	1070	1500	760	225	220	810	150	70	14.2	11	11.25	✓	25	9/4	9/4	3/4		
13 15	757	-	1090	1510	755	225	215	815	145	70	14.2	11	11.25	✓	25	9/4	9/4	3/4		

STOP START TOTAL	GAS	GAS 11-7	GAS 7-3	GAS 3-11	OIL	OIL 11-7	OIL 7-3	OIL 3-11

DATE 04/12/87

PLANT LPPCP

SCRUBBER WATER FLOW

TIME	TOTALIZER READING		TOTAL FLOW		PRE-SCRUBBER FLOW	
	(GAL X 100)		(GPM)		(GPM)	
1100	637	800	913		69.2	
1115	637	937	867		68.6	
1130	638	067	807		68.5	
1145	638	188	840		67.0	
1200	638	314	833		68.0	
1215	638	439	820		67.2	
1230	638	562	840		67.8	
1245	638	688	873		68.2	
1300	638	819	800		67.7	
1315	638	939			68.0	

GAS FLOW	
TOTALIZER READING	FLOW
(CUBIC FT)	(FT ³ /MIN)
199,731,000	
→ 299,853,000	2033
→ 199,983,000	1733

Updated by QER
on 01/15/89

186.7 ft³/min

DAILY RAW SLUDGE FED TO HOLDING TANK ^a

<u>DATE</u>	<u>PRIMARY</u>		<u>SECONDARY</u>	
	<u>TOTAL GAL</u> <u>24 HRS</u>	<u>%</u>	<u>TOTAL GAL</u> <u>24 HRS</u>	<u>%</u>
4/07/87	234,900	74	80,930	26.
4/08/87	200,000	59	139,972	41
4/09/87	143,541	51	139,291	49
4/10/87	94,433	39	148,937	61
4/11/87	65,252	39	100,009	61
4/12/87				

^a Based on estimates from plant operators

**ADDITIONAL SEMI-VOLATILE COMPOUNDS
FOUND IN THE FLUE GAS**

XAD, Filter, Liquids
FX-10, FX-9 Run 1

also found?

P-404010-09A

File: F871603

<u>Scan</u>	<u>Compound</u>	<u>Estimated</u>	<u>Quantity</u>
296	*3-penten-2-one	54	ug
379	C ₇ H ₁₄	192	
~450-600	*alkoxy alcohol	~4,200,000	
584	C ₆ H ₁₀ O	1267	
604	carboxylic acid	9	
620	propylpentane	80	
677	*alkoxy alcohol	164	
765	C ₆ H ₁₀ O	82	
767	*alkoxy alcohol	46	
781	*alkoxy alcohol	17	
787	C ₄ -alkylbenzene	11	
796	*benzoic acid	30	
802	methoxypentanone	39	
818	*alkoxy alcohol	806	
898	*ethylacetophenone	3	
947	*ethylbenzoic acid	2	
951	*benzaldehyde + unknown	16	
986	biphenyl	5	
1114	dodecanoic acid	3	
1150	diethyl phthalate	13	
1184	C ₁₀ H ₁₄ O	2	
204	alkylbenzene	3	
221	hydrocarbon	2	

	C_{11} -alkylbenzene	10
1276	C_{12} -alkylbenzene	2
1333	$C_{14}H_{25}CHO$	1
1344	tetradecene	4
1402	butyl isobutyl phthalate	31
1459	$C_{16}H_{29}CHO$	51
1472	octadecene	2

* may be XAD artifacts

Run 3 Train
FX-21 FX-22
XAD, Filter, Liquids

P-704010-10A

File: F871604

<u>Scan</u>	<u>Compound</u>	<u>Estimated Quantity</u>
292	*3-penten-2-one	107 μ g
372	*methylpentenone	477
385	$C_6H_{10}O$	23
480	methylbenzotrifu	179
512	alkoxy alkanol	4,500,000 -
572	$C_6H_{10}O$	1689
675	alkoxy alkanol	193 -
764	hydrocarbon	152
772	alkoxy alkanol	719 =
793	*benzoic acid	32
800	alkoxy alkanol	87 -
817	alkoxy alkanol	1401 -
919	alkylphenol	43
939	alkylphenol	15
962	alkylphenol	6
1114	dodecanoic acid	5
1149	~~dimethyl~~ phthalate	6
1344	~~dimethyl~~	5
1401	butyl isobutyl phthalate	24
1459	$C_{16}H_{24}ClH$	43

* may be XAD artifacts.

FX-221 FX-222 Run 4
XAD, Filter, Liquids

P-704010-11A

File: F871605

<u>Scan</u>	<u>Compound</u>	<u>Estimated Quantity</u>
306	~~XXXXXXXXXX~~	12 ug
354	* 4-methyl-3-penten-2-one	1916
~500	alkoxy alkanol	~3,500,000
646	$C_8H_{12}O$	53
756	$C_{11}H_{24}$	116
761	$C_8H_{10}O^*$	84
782	alkoxy alkanol	3279
815	alkoxy alkanol	2743
1148	diethyl phthalate	38
1344	tetradecene	4
1401	butyl isobutyl phthalate	35
1459	* $C_{16}H_{29}CHO$	37
1474	hexadecene	9

FX-212 Run 4

P-704010-26A (Repeat)

File: F871597

<u>Scan</u>	<u>Compound</u>	<u>Estimated Quantity</u>
614	decane	1 μ g/g
682	unknown	0.6
689	cresol	13
720	undecane	2
816	dodecane	2
834	$C_{10}H_{18}$	0.4
883	$C_{11}H_{24}$	0.6
906	indole, tridecane	4
984	pyridinecarboxamide	0.4
989	methylinidolizine	3
992	tetradecane	2
1051	dodecanol	1
1073	pentadecane	6
1130	dodecanol.	6
1149	heptadecane	2
1205	dodecene	2
1222	heptadecane	3
1227	$C_{13}H_{28}$	1
1277	dodecanol	0.7
1291	octadecane	1
1345	tetradecene	3
1369	chlorophenylethylphenol C-8	0.2
1459	~~$C_{16}H_{34}$~~	2

1472 octadecene

2

FX-227, FX-228 Run 5
XAD, Filter, Liquids

P-704010-12A

Title: F871606

<u>Scan</u>	<u>Compounds</u>	<u>Estimated Quantity</u>
305	* 3-penten-2-one	80 μ g
381	$C_6H_{10}O$	314
391	4-methyl-3-penten-2-one	32
440	chlorobenzene	18
~500	alkoxy alkanol	~ 2,800,000
604	benzaldehyde + hydroxybenzyl alcohol	4
647	diethylbenzene + C_9H_{16}	7
674	alkoxy alkanol	74
703	$C_{10}H_{18}O$	11
719	$C_{10}H_{20}$	4
796	* benzoic acid	12
812	naphthalene	22
986	biphenyl	3
1149	diethyl phthalate	3
1345	tetradecene	2
1401	~~butyl~~ ~~acetyl~~ phthalate	8
1460	$C_{16}H_{24}O$	18

Field Blank (Grain)
FX-37, FX-38 XAD, Filter, Liquid
F871607

P-704010-13A

<u>Scan</u>	<u>Compound</u>	<u>Estimated Quantity</u>
298	* 3-penten-2-one	64 μ g
376	* methylpentenone	128
555	hexanol	14
640	$C_9H_{16}O_2$	5
766	$C_6H_{10}O$	54
1149	diethyl phthalate	3
1332	tribromoaniline	1
1345	tetradecene	1
1459	$C_{16}H_{32}CHO$	20

**ADDITIONAL SEMI-VOLATILE COMPOUNDS
FOUND IN THE SCRUBBER WATER**

Run 1 . FFX-0409-SW-01-SV-A

P-704010-18A

Run 1

File: F87 1572

<u>Scan</u>	<u>Compound</u>	<u>Estimated Quantity</u>
284	dichloropropane	9
574	benzaldehyde	3
1255	tetradecanoic acid	1
1330	caffeine	5
1388	heptadecanoic acid	3

Run 1
FFX-0409-SW-01-SV-A

P-704010-22A File: F871573

<u>Scan</u>	<u>Compound</u>	<u>Estimated Quantity</u>
340	toluene	8 $\mu\text{g/L}$
395	tetrachloroethylene	0.2
575	benzaldehyde	0.6
1330	caffeine	1
1387	heptadecanoic acid	0.5

Run 1
 FI-X-0409-SW-01-SV-A

FX-216 Run 1

P-704010-23A

File: F871576

<u>Scan</u>	<u>Compound</u>	<u>Estimated Quantity</u>
276	dichloropropane	7 $\mu\text{g/L}$
334	toluene	303
764	dimethylphenol	201
803	trichlorobenzene	226
1125	tetrachlorophenol	1
1330	caffeine	6
1355	chlordane isomer	4
1381	heptachlor	3
1387	heptadecanoic acid	9
1464	chlordane isomer	2
1498	chlordane isomer	3
1506	chlordane isomer	5
1525	chlordane isomer	4
1531	nonachlor	2
1622	unknown pesticide	1
1646	bis(2-ethylhexyl) sebacate	25
1735	chrysene	2

Water, Method Blank Duplicate

P - 704011

File: F871565

Scan

1657

Compound

bis(2-ethylhexyl)
hexanedioate

Estimated Quantity

6 $\mu\text{g/L}$

Water, Method Blank

P-704011

File #871564

Scan

Compound

Estimated Quantity

1657

mono (2-ethylhexyl)
hexanedioate

5 $\mu\text{g/L}$

Matrix Spike (Water)
P-704010-15A

	% Recovery	Surrogates
chlorobenzene	57%	2-fluorophenol 65%
m-dichlorobenzene	69%	d ₆ -phenol 68%
p-dichlorobenzene	67%	d ₅ -chlorobenzene 108%
o-dichlorobenzene	67%	d ₅ -nitrobenzene 81%
2-chlorophenol	67%	2-fluorobiphenyl 77%
tetrachloroethene	51%	d ₁₄ -terphenyl 60%
phenol	68%	2,4,6-tribromophenol 85%
2-nitrophenol	78%	
4-nitrophenol	51%	
1,2,4-trichlorobenzene	77%	
2,4-dichlorophenol	72%	
2,4-dimethylphenol	77%	
p-chloro-m-cresol	71%	
2,4,6-trichlorophenol	81%	
2,4-dinitrophenol	32%	
4,6-dinitro-2-methylphenol	71%	
pentachlorophenol	71%	
bis(2-ethylhexyl) phthalate	55%	
benzo(a) pyrene	44%	
aldrin	80%	
dieldrin	63%	

Method Blank, Sludge Feed "also founds"
P-704011 - 030 File: F871596

<u>Ion</u>	<u>Compound</u>	<u>Estimated Quantity</u>
1332	$C_{14}H_{25}CHO$	1 ng/ μ L
1343	tetradecene	2
1396	aldehyde	0.4
1401	butyl isobutyl phthalate	8
1422	aldehyde	0.1
1458	$C_{16}H_{29}CHO$	42
1471	octadecene	0.9
1575	aldehyde	0.4

P-704010-19A

File 1-871575

<u>Scan</u>	<u>Compound</u>	<u>Estimated Quantity</u>
413	butanoic acid	83 ug/L
468	styrene	8
511	tert-butylhexane	119
559	methylpentanoic acid	7
652	benzyl alcohol	8
691	cresol	19
736	phenyl ethanol	13
781	benzoic acid	16
804	2-(2-butoxyethoxy) ethanol	19
814	$C_{10}H_{16}$	27
860	phenyl acetic acid	95
905	indole	36
931	phenylpropanoic acid	15
954	decanoic acid	6
1084	hydroxydecanoic acid	10
1113	dodecanoic acid	23
1225	indole diene	3
1232	ethyldecanol	3
1258	tetradecanoic acid	29
1324	pentadecanoic acid	5
1332	caffeine	24
1341	$C_{16}H_{32}$	11
1366	chlorophenylmethylphenol	1
1380	alcohol	15
1393	heptadecanoic acid	124
1468	tetradecanol	6
1502	$C_{18}H_{32}O$	27
1514	octadecanoic acid	36

P-704010-20A

File: F871576

<u>Scan</u>	<u>Compound</u>	<u>Estimated Quantity</u>
406	crotonic acid	7 $\mu\text{g/L}$
511	tetramethylhexane	119
529	methylpentanediol	23
544	2-(2-methoxyethoxy) ethanol	19
559	methylpentanoic acid	6
593	carboxylic acid	16
618	diethoxyethane	16
652	benzyl alcohol	12
690	cresol	44
758	$\text{C}_{10}\text{H}_{18}\text{O}$	5
768	$\text{C}_{10}\text{H}_{18}\text{O}$	6
780	benzoic acid	25
784	octanoic acid	16
804	2-(2-butoxyethoxy) ethanol	44
813	$\text{C}_{10}\text{H}_{16}$	71
819	$\text{C}_{10}\text{H}_{16}$	4
835	phenoxyethanol	6
857	phenylacetic acid	65
904	indole	54
931	phenylpropanoic acid	15
954	decanoic acid	8
1084	hydroxydecanoic acid	10
1093	biphenylol	6
1112	dodecanoic acid	24
1146	diethyl phthalate	10
1215	hydroxyphenylacetamide	3
1224	indole dione	3
1257	tetradecanoic acid	36
1324	pentadecanoic acid	6
1331	caffeine	26
1392	heptadecanoic acid	143
1468	octadecene	11
1513	octadecanoic acid	30

P-704010-21A

Date: F871577

<u>Scan</u>	<u>Compound</u>	<u>Estimated</u> <u>Quantity</u>
506	2-butylethanol	31 $\mu\text{g/L}$
650	benzyl alcohol	5
689	cresol	7
734	phenyl ethanol	11
780	benzoic acid	17
795	methylisopropylcyclohexanol	3
803	2-(2-butylthio)ethanol	13
813	$\text{C}_{10}\text{H}_{16}$	14
858	phenylacetic acid	94
899	hydroxybenzoic acid	3
904	indole	31
931	phenylpropanoic acid	24
953	decanoic acid	7
1084	hydroxydecanoic acid	11
1113	dodecanoic acid	24
1146	diethyl phthalate	6
1214	propoxyaniline	5
1224	indole(1,3-dione)	7
1257	tetradecanoic acid	31
1324	pentadecanoic acid	5
1331	caffeine	24
1341	tetradecanol	9
1379	hexadecenoic acid	16
1392	hexadecanoic acid	110
1468	hexadecene	7
1501	heptadecene	18
1513	octadecanoic acid	16

Run 6A

Water

SV

FX 287

FFX-0409-SW-SV-06A

P-704011-20A

File: 871569

<u>Scan</u>	<u>Compound</u>	<u>Estimated Quantity</u>
421	C ₅ H ₆ O ₂	50 µg/L
450	ethylbenzene	14
702	hexachloroethane	2
1038	dimethylphthalate	21
1076	acenaphthene	10
1153	fluorene	15
1155	chlorophenoxylbenzene	11
1229	bromophenoxylbenzene	6
1307	phenanthrene	10
1485	pyrene	23
1630	butyl benzyl phthalate	7
1737	chrysene	8

Matrix Spike

P 704616 - 30A

sludge
ug/g

Compounds	Unspiked	Spiked	% Recovery
n-dichlorobenzene		83	83%
p-dichlorobenzene		83	83%
2-dichlorobenzene		86	86%
2-chlorophenol		85	85%
tetrachloroethene		73	73%
phenol		87	87%
2-nitrophenol		77	77%
4-nitrophenol		64	64%
1,2,4-trichlorobenzene		82	82%
2,4-dichlorophenol		85	85%
2,4-dimethylphenol		85	85%
2-chloro-m-cresol		92	92%
2,4,6-trichlorophenol		92	92%
2,4-dinitrophenol		12	12%
4,6-dinitro-2-methylphenol		36	36%
pentachlorophenol		34	34%
bis(2-ethylhexyl)phthalate	12	65	53%
benzo(a)pyrene		71	71%
aldrin		76	76%
dieldrin		65	65%

Isotopes

2-fluorophenol	105%	84%
d ₆ -phenol	97%	89%
d ₅ -chlorobenzene	143%	119%
d ₅ -nitrobenzene	73%	81%
2-fluorobiphenyl	83%	91%
d _{1,4} -terphenyl	54%	65%
2,4,6-tribromophenol	95%	86%

Run 7A Water SV

P-704011-23A

Run 7A FFX0409-SW-SV-07A

File : F871570

<u>Scan</u>	<u>Compound</u>	<u>Estimated</u>	<u>Quantity</u>
894	chlorocresol	6	μg/L
1154	fluorene	8	
1156	chlorophenopy benzene	4	
1487	pyrene	11	

Run 8A Water SV
P-704011-26A

AUDIT
Run 8A FFX-0409-SW-
SV-08A FX292

File: F871571

Scan

1646

Compound

bis(2-ethylhexyl)
sebacate

Estimated Quantity

5 µg/L

**ADDITIONAL SEMI-VOLATILES COMPOUNDS
FOUND IN THE SLUDGE FEED**

P 704010-29A

Run 01 FX-122

File: F871589

<u>Scan</u>	<u>Compound</u>	<u>Estimated</u>	<u>Quantity</u>
547	methylpentanoic acid	3	μg/g
650	$C_{10}H_{16}$	2	
689	cresol	18	
906	indole	82	
1114	dodecanoic acid	7	
1205	tetradecene	3	
1333	tetradecanediol	5	
1344	hexadecene	13	
1392	pentadecene	3	
1402	butyl isobutyl phthalate	45	
1459	$C_{16}H_{29}CHO$	194	
1472	$C_{20}H_{40}O$	7	

P- 704010 - 26A

FX-212 Run #4

File: F871590

<u>Scan</u>	<u>Compound</u>	<u>Estimated Quantity</u>
1205	decanol	3 $\mu\text{g/g}$
1333	$\text{C}_{14}\text{H}_{25}\text{CHO}$	9
1345	tetradecene	19
1392	$\text{C}_{12}\text{H}_{24}$	3
1397	$\text{C}_{16}\text{H}_{33}\text{CHO}$	3
1402	butyl isobutyl phthalate	70
1459	$\text{C}_{16}\text{H}_{29}\text{CHO}$	327
1472	heptadecene	11

P-704010 - 24A

File: F871591

<u>Scan</u>	<u>Compound</u>	<u>Estimated Quantity</u>
689	cresol	18 $\mu\text{g/g}$
905	indole	87
988	methylin dolizine	9
1204	dodecene	4
1332	$\text{C}_{14} \text{H}_{25} \text{CHO}$	5
1343	tetradecene	14
1401	butyl isobutyl phthalate	38
1458	$\text{C}_{16} \text{H}_{29} \text{CHO}$	181
1471	heptadecene	8

FX-268

FFX-0412-SF-05-SVA

P-704010-27A

File: F871592

<u>Scan</u>	<u>Compound</u>	<u>Estimated Quantity</u>
689	creosol	24 µg/g
720	hydrocarbon	5
906	indole	6
988	methylinole	20
1051	decene	6
1130	methylnodecene	3
1149	diethyl phthalate	10
1204	dodecene	11
1221	$C_{11}H_{24}$	7
1276	dodecanol	4
1333	$C_{14}H_{28}CHO$	6
1344	tetradecene	30
1401	butyl isobutyl phthalate	45
1458	$C_{16}H_{32}CHO$	187
1471	octadecene	14

FX-270 Run #5 Duplicate
Sludge

P-704010-28A

File: F871593

<u>Scan</u>	<u>Compound</u>	<u>Estimated Quantity</u>
693	cresol	26 ug/g
907	indole	5
988	methylinole	14
1050	decene	3
1204	dodecene	5
1220	$C_{13}H_{28}$	4
1275	dodecanol	2
1332	$C_{14}H_{28}CHO$	4
1343	tetradecene	16
1401	butyl isobutyl phthalate	27
1458	$C_{16}H_{32}CHO$	142
1470	octadecene	7

P-7-04-010

File: F871598

<u>Scan</u>	<u>Compound</u>	<u>Estimated Quantity</u>
657	$C_{10}H_{16}$	5 $\mu g/g$
694	acetone	16
907	indole + hydrocarbon	6
1051	decene	6
1130	dodecanol	2
1148	$C_{13}H_{28}$	5
1205	$C_{12}H_{24}$	11
1221	hydrocarbon	8
1235	hydrocarbon	5
1276	unsaturated hydrocarbon	4
1333	$C_{14}H_{25}CHO$	7
1344	tetradecene	30
1397	aldehyde	2
1458	$C_{26}H_{54}$	170
1471	retene	11

FX-212 Run #4

File: F871590

<u>Scan</u>	<u>Compound</u>	<u>Estimated Quantity</u>
1205	decanol	3 $\mu\text{g/g}$
1333	~~XXXXXXXXXX~~	9
1345	tetradecene	19
1392	$\text{C}_{12}\text{H}_{24}$	3
1397	$\text{C}_{16}\text{H}_{33}\text{CHO}$	3
1402	butyl isobutyl phthalate	70
1459	$\text{C}_{16}\text{H}_{29}\text{CHO}$	327
1472	heptadecene	11

P-704010 - 27A

File: F871592

<u>Scan</u>	<u>Compound</u>	<u>Estimated Quantity</u>
689	~~octadecene~~	24 μ g/g
720	hydrocarbon	5
906	indole	6
988	methylindole	20
1051	decene	6
1130	methylundecene	3
1149	diethyl phthalate	10
1204	dodecene	11
1221	$C_{11}H_{24}$	7
1276	dodecanol	4
1333	$C_{14}H_{28}CHO$	6
1344	tetradecene	30
1401	butyl isobutyl phthalate	45
1458	$C_{16}H_{32}CHO$	187
1471	octadecene	14

FX-270 Run 05 Duplicate
Sludge

P-704010-28A

File: F871593

<u>Scan</u>	<u>Compound</u>	<u>Estimated Quantity</u>
693	orecol	26 ug/g
907	indole	5
988	methylindole	14
1050	decene	3
1204	dodecene	5
1220	C ₁₃ H ₂₈	4
1275	dodecanol	2
1332	C ₁₄ H ₂₅ CHO	4
1343	tetradecene	16
1401	butyl isobutyl phthalate	27
1458	C ₁₆ H ₂₉ CHO	142
1470	octadecene	7

ADDITIONAL VOLATILE COMPOUNDS

SITE 1:

VOLATILES SUMMARY OF Reportable "Also Finds"

VOST:

Chlorodifluoromethane
chlorotoluene
cyclopentane
dichlorobenzene

2-methoxy-2-methylpropane
2-methylbutane
2-methylpropane
3-methyl-2-pentanol
1-propanol
styrene
Trichlorofluoromethane
xylene
 C_8H_{10}
 $C_{10}H_{16}$
 C_5H_{10}

Scrubber

Water:

Acetone
Bromodichloromethane
cyanogen chloride
Hexane
2-methoxy-2-methylpropane
2-methylbutanal
xylene
 C_4H_8O

Sludge:

Acetone
Butanoic acid, methyl ester
Butanoic acid, 2-methyl-, methyl ester
 $C_{10}H_{16}$
Dichlorobenzene
Phenol
Thiodibromomethane
Trichlorofluoromethane
Xylene
ethanol

SITE 1: VOST "Also founds" > 100mg

1/2

		est. NG
FX-286-VOST-05-FB	PENTANE	2230
FX-283-VOST-05-B	2-methoxy-2-methylpropane	2604
	dichlorobenzene	318
	styrene	223
FX-250-VOST-03-FB	Pentane	302
FX-170-VOST-01-FB	Pentane	1676
FX-240-VOST-05-D	Pentane	400
	m,p-xylene	571
FX-246-VOST-02-A	Pentane	1304
	Benzaldehyde	1443 *
	1-ethyl-3-methylene cyclopentane	1169
FX-247-VOST-03-B	m,p-xylene	2222
	o-xylene	1063
	dichlorobenzene	104
FX-248-VOST-03-C	m,p-xylene	777
	1,2-dichloroethane	256
	o-xylene	584
FX-167-VOST-02-C	1-propene	1382
	pentane	2449
	dichlorobenzene	289
FX-169-VOST-01-FB	trichlorofluoromethane	478
	ethylcyclopropane	1144
	methylbutane	235
	pentane	3156
FX-171-VOST-TB	Pentane	4160
FX-162-VOST-01-B	Pentane	4374
	dichlorobenzene	178
FX-161-VOST-01-A	1-propene	1228
	cyclopentane	1163
	pentane	1710
	dichlorobenzene	101
FX-163-VOST-01-C	Pentane	593
	dichlorobenzene	110
FX-164-VOST-01-D	1-propene	1275
	pentane	3150
	dichlorobenzene	160

SITE 1:

"Also founds" (cont'd)

2/2

FX-285-VOST-05-D
FX-284-VOST-05-C

Pentane	3305
Dichlorobenzene	257
pentane	3484
dichlorobenzene	201

FX-282-VOST-05-A

1-propene	654
hexane	1063

FX-168-VOST-02-D
FX-166-VOST-02-B

Dichlorobenzene	248
1-propene	2325
pentane	3325
dichlorobenzene	219

FX-165-VOST-02-A

1-propene	1937
2-methyl-2-propenal	2217
2-methylfuran	645
dichlorobenzene	218

Scrubber Water

~~FX-185 816-03-406A A2~~

ug/l

FX-185

Acetone	12
m,p-xylene	6
p-xylene	5
bromodichloromethane	0.6

FX-139

cyanoogen chloride	10
acetone	17
bromodichloromethane	5
hexane	8

FX-139

acetone	16
bromodichloromethane	3
hexane	6

FX-195

acetone	26
BDCM	3
~~2-methylbutanol~~	~~2~~
~~3-methylbutanol~~	~~2~~

FX-262

acetone	12
2-methoxy-2-methylpropane	47
~~Dimethoxydimethylsilane~~	~~2~~

FX-192

acetone	29
BDCM	0.9
~~2-hexanol~~	~~2~~
m,p-xylene	2

Sludge "Also founds"

(ug/kg)

FX-147, 149

923

acetone 1101
Trichlorofluoromethane 270
2 methylbutanoic acid methyl ester 581
~~acetone~~ xylene 497
o-xylene 422

FX-151, 153

acetone 1408
butanoic acid, methyl ester 366
xylene 249

FX-188, 189

~~acetone~~ acetone 438
Butanoic acid, methyl ester 316
Butanoic acid, 2 methyl, methyl ester 181
C₁₀ H₁₆ 116
xylene 348

FX-196, 197

acetone 530
trichlorofluoromethane 175
butanoic acid, methyl ester 306
butanoic acid, 2 methyl - methyl ester 206
phenol 586
xylene 133
C₁₀ H₁₆ 469

VOLUME VII

APPENDIX A
INCINERATOR AND SCRUBBER
OPERATING DATA

INCINERATOR No.2

50T-103

INCINERATOR No. 2

[illegible]

LINE NR.	CENTRIFUGE NO.	TOTAL FEED WQI-150	AUG. Tons	TEMPERATURE												FURNACE												INCHES	CAPACITY	H.D.																																																																																																																																																																																																																																																																																																																																																																																																																																															
				T ₁ 101 (PT-1)	T ₂ 102 (PT-2)	T ₃ 103 (PT-3)	T ₄ 104 (PT-4)	T ₅ 105 (PT-5)	T ₆ 106 (PT-6)	T ₇ 107 (PT-7)	T ₈ 108 (PT-8)	T ₉ 109 (PT-9)	T ₁₀ 110 (PT-10)	T ₁₁ 111 (PT-11)	T ₁₂ 112 (PT-12)	T ₁₃ 113 (PT-13)	T ₁₄ 114 (PT-14)	T ₁₅ 115 (PT-15)	T ₁₆ 116 (PT-16)	T ₁₇ 117 (PT-17)	T ₁₈ 118 (PT-18)	T ₁₉ 119 (PT-19)	T ₂₀ 120 (PT-20)	T ₂₁ 121 (PT-21)	T ₂₂ 122 (PT-22)	T ₂₃ 123 (PT-23)	T ₂₄ 124 (PT-24)				T ₂₅ 125 (PT-25)	T ₂₆ 126 (PT-26)	T ₂₇ 127 (PT-27)	T ₂₈ 128 (PT-28)	T ₂₉ 129 (PT-29)	T ₃₀ 130 (PT-30)	T ₃₁ 131 (PT-31)	T ₃₂ 132 (PT-32)	T ₃₃ 133 (PT-33)	T ₃₄ 134 (PT-34)	T ₃₅ 135 (PT-35)	T ₃₆ 136 (PT-36)	T ₃₇ 137 (PT-37)	T ₃₈ 138 (PT-38)	T ₃₉ 139 (PT-39)	T ₄₀ 140 (PT-40)	T ₄₁ 141 (PT-41)	T ₄₂ 142 (PT-42)	T ₄₃ 143 (PT-43)	T ₄₄ 144 (PT-44)	T ₄₅ 145 (PT-45)	T ₄₆ 146 (PT-46)	T ₄₇ 147 (PT-47)	T ₄₈ 148 (PT-48)	T ₄₉ 149 (PT-49)	T ₅₀ 150 (PT-50)	T ₅₁ 151 (PT-51)	T ₅₂ 152 (PT-52)	T ₅₃ 153 (PT-53)	T ₅₄ 154 (PT-54)	T ₅₅ 155 (PT-55)	T ₅₆ 156 (PT-56)	T ₅₇ 157 (PT-57)	T ₅₈ 158 (PT-58)	T ₅₉ 159 (PT-59)	T ₆₀ 160 (PT-60)	T ₆₁ 161 (PT-61)	T ₆₂ 162 (PT-62)	T ₆₃ 163 (PT-63)	T ₆₄ 164 (PT-64)	T ₆₅ 165 (PT-65)	T ₆₆ 166 (PT-66)	T ₆₇ 167 (PT-67)	T ₆₈ 168 (PT-68)	T ₆₉ 169 (PT-69)	T ₇₀ 170 (PT-70)	T ₇₁ 171 (PT-71)	T ₇₂ 172 (PT-72)	T ₇₃ 173 (PT-73)	T ₇₄ 174 (PT-74)	T ₇₅ 175 (PT-75)	T ₇₆ 176 (PT-76)	T ₇₇ 177 (PT-77)	T ₇₈ 178 (PT-78)	T ₇₉ 179 (PT-79)	T ₈₀ 180 (PT-80)	T ₈₁ 181 (PT-81)	T ₈₂ 182 (PT-82)	T ₈₃ 183 (PT-83)	T ₈₄ 184 (PT-84)	T ₈₅ 185 (PT-85)	T ₈₆ 186 (PT-86)	T ₈₇ 187 (PT-87)	T ₈₈ 188 (PT-88)	T ₈₉ 189 (PT-89)	T ₉₀ 190 (PT-90)	T ₉₁ 191 (PT-91)	T ₉₂ 192 (PT-92)	T ₉₃ 193 (PT-93)	T ₉₄ 194 (PT-94)	T ₉₅ 195 (PT-95)	T ₉₆ 196 (PT-96)	T ₉₇ 197 (PT-97)	T ₉₈ 198 (PT-98)	T ₉₉ 199 (PT-99)	T ₁₀₀ 200 (PT-100)	T ₁₀₁ 201 (PT-101)	T ₁₀₂ 202 (PT-102)	T ₁₀₃ 203 (PT-103)	T ₁₀₄ 204 (PT-104)	T ₁₀₅ 205 (PT-105)	T ₁₀₆ 206 (PT-106)	T ₁₀₇ 207 (PT-107)	T ₁₀₈ 208 (PT-108)	T ₁₀₉ 209 (PT-109)	T ₁₁₀ 210 (PT-110)	T ₁₁₁ 211 (PT-111)	T ₁₁₂ 212 (PT-112)	T ₁₁₃ 213 (PT-113)	T ₁₁₄ 214 (PT-114)	T ₁₁₅ 215 (PT-115)	T ₁₁₆ 216 (PT-116)	T ₁₁₇ 217 (PT-117)	T ₁₁₈ 218 (PT-118)	T ₁₁₉ 219 (PT-119)	T ₁₂₀ 220 (PT-120)	T ₁₂₁ 221 (PT-121)	T ₁₂₂ 222 (PT-122)	T ₁₂₃ 223 (PT-123)	T ₁₂₄ 224 (PT-124)	T ₁₂₅ 225 (PT-125)	T ₁₂₆ 226 (PT-126)	T ₁₂₇ 227 (PT-127)	T ₁₂₈ 228 (PT-128)	T ₁₂₉ 229 (PT-129)	T ₁₃₀ 230 (PT-130)	T ₁₃₁ 231 (PT-131)	T ₁₃₂ 232 (PT-132)	T ₁₃₃ 233 (PT-133)	T ₁₃₄ 234 (PT-134)	T ₁₃₅ 235 (PT-135)	T ₁₃₆ 236 (PT-136)	T ₁₃₇ 237 (PT-137)	T ₁₃₈ 238 (PT-138)	T ₁₃₉ 239 (PT-139)	T ₁₄₀ 240 (PT-140)	T ₁₄₁ 241 (PT-141)	T ₁₄₂ 242 (PT-142)	T ₁₄₃ 243 (PT-143)	T ₁₄₄ 244 (PT-144)	T ₁₄₅ 245 (PT-145)	T ₁₄₆ 246 (PT-146)	T ₁₄₇ 247 (PT-147)	T ₁₄₈ 248 (PT-148)	T ₁₄₉ 249 (PT-149)	T ₁₅₀ 250 (PT-150)	T ₁₅₁ 251 (PT-151)	T ₁₅₂ 252 (PT-152)	T ₁₅₃ 253 (PT-153)	T ₁₅₄ 254 (PT-154)	T ₁₅₅ 255 (PT-155)	T ₁₅₆ 256 (PT-156)	T ₁₅₇ 257 (PT-157)	T ₁₅₈ 258 (PT-158)	T ₁₅₉ 259 (PT-159)	T ₁₆₀ 260 (PT-160)	T ₁₆₁ 261 (PT-161)	T ₁₆₂ 262 (PT-162)	T ₁₆₃ 263 (PT-163)	T ₁₆₄ 264 (PT-164)	T ₁₆₅ 265 (PT-165)	T ₁₆₆ 266 (PT-166)	T ₁₆₇ 267 (PT-167)	T ₁₆₈ 268 (PT-168)	T ₁₆₉ 269 (PT-169)	T ₁₇₀ 270 (PT-170)	T ₁₇₁ 271 (PT-171)	T ₁₇₂ 272 (PT-172)	T ₁₇₃ 273 (PT-173)	T ₁₇₄ 274 (PT-174)	T ₁₇₅ 275 (PT-175)	T ₁₇₆ 276 (PT-176)	T ₁₇₇ 277 (PT-177)	T ₁₇₈ 278 (PT-178)	T ₁₇₉ 279 (PT-179)	T ₁₈₀ 280 (PT-180)	T ₁₈₁ 281 (PT-181)	T ₁₈₂ 282 (PT-182)	T ₁₈₃ 283 (PT-183)	T ₁₈₄ 284 (PT-184)	T ₁₈₅ 285 (PT-185)	T ₁₈₆ 286 (PT-186)	T ₁₈₇ 287 (PT-187)	T ₁₈₈ 288 (PT-188)	T ₁₈₉ 289 (PT-189)	T ₁₉₀ 290 (PT-190)	T ₁₉₁ 291 (PT-191)	T ₁₉₂ 292 (PT-192)	T ₁₉₃ 293 (PT-193)	T ₁₉₄ 294 (PT-194)	T ₁₉₅ 295 (PT-195)	T ₁₉₆ 296 (PT-196)	T ₁₉₇ 297 (PT-197)	T ₁₉₈ 298 (PT-198)	T ₁₉₉ 299 (PT-199)	T ₂₀₀ 300 (PT-200)	T ₂₀₁ 301 (PT-201)	T ₂₀₂ 302 (PT-202)	T ₂₀₃ 303 (PT-203)	T ₂₀₄ 304 (PT-204)	T ₂₀₅ 305 (PT-205)	T ₂₀₆ 306 (PT-206)	T ₂₀₇ 307 (PT-207)	T ₂₀₈ 308 (PT-208)	T ₂₀₉ 309 (PT-209)	T ₂₁₀ 310 (PT-210)	T ₂₁₁ 311 (PT-211)	T ₂₁₂ 312 (PT-212)	T ₂₁₃ 313 (PT-213)	T ₂₁₄ 314 (PT-214)	T ₂₁₅ 315 (PT-215)	T ₂₁₆ 316 (PT-216)	T ₂₁₇ 317 (PT-217)	T ₂₁₈ 318 (PT-218)	T ₂₁₉ 319 (PT-219)	T ₂₂₀ 320 (PT-220)	T ₂₂₁ 321 (PT-221)	T ₂₂₂ 322 (PT-222)	T ₂₂₃ 323 (PT-223)	T ₂₂₄ 324 (PT-224)	T ₂₂₅ 325 (PT-225)	T ₂₂₆ 326 (PT-226)	T ₂₂₇ 327 (PT-227)	T ₂₂₈ 328 (PT-228)	T ₂₂₉ 329 (PT-229)	T ₂₃₀ 330 (PT-230)	T ₂₃₁ 331 (PT-231)	T ₂₃₂ 332 (PT-232)	T ₂₃₃ 333 (PT-233)	T ₂₃₄ 334 (PT-234)	T ₂₃₅ 335 (PT-235)	T ₂₃₆ 336 (PT-236)	T ₂₃₇ 337 (PT-237)	T ₂₃₈ 338 (PT-238)	T ₂₃₉ 339 (PT-239)	T ₂₄₀ 340 (PT-240)	T ₂₄₁ 341 (PT-241)	T ₂₄₂ 342 (PT-242)	T ₂₄₃ 343 (PT-243)	T ₂₄₄ 344 (PT-244)	T ₂₄₅ 345 (PT-245)	T ₂₄₆ 346 (PT-246)	T ₂₄₇ 347 (PT-247)	T ₂₄₈ 348 (PT-248)	T ₂₄₉ 349 (PT-249)	T ₂₅₀ 350 (PT-250)	T ₂₅₁ 351 (PT-251)	T ₂₅₂ 352 (PT-252)	T ₂₅₃ 353 (PT-253)	T ₂₅₄ 354 (PT-254)	T ₂₅₅ 355 (PT-255)	T ₂₅₆ 356 (PT-256)	T ₂₅₇ 357 (PT-257)	T ₂₅₈ 358 (PT-258)	T ₂₅₉ 359 (PT-259)	T ₂₆₀ 360 (PT-260)	T ₂₆₁ 361 (PT-261)	T ₂₆₂ 362 (PT-262)	T ₂₆₃ 363 (PT-263)	T ₂₆₄ 364 (PT-264)	T ₂₆₅ 365 (PT-265)	T ₂₆₆ 366 (PT-266)	T ₂₆₇ 367 (PT-267)	T ₂₆₈ 368 (PT-268)	T ₂₆₉ 369 (PT-269)	T ₂₇₀ 370 (PT-270)	T ₂₇₁ 371 (PT-271)	T ₂₇₂ 372 (PT-272)	T ₂₇₃ 373 (PT-273)	T ₂₇₄ 374 (PT-274)	T ₂₇₅ 375 (PT-275)	T ₂₇₆ 376 (PT-276)	T ₂₇₇ 377 (PT-277)	T ₂₇₈ 378 (PT-278)	T ₂₇₉ 379 (PT-279)	T ₂₈₀ 380 (PT-280)	T ₂₈₁ 381 (PT-281)	T ₂₈₂ 382 (PT-282)	T ₂₈₃ 383 (PT-283)	T ₂₈₄ 384 (PT-284)	T ₂₈₅ 385 (PT-285)	T ₂₈₆ 386 (PT-286)	T ₂₈₇ 387 (PT-287)	T ₂₈₈ 388 (PT-288)	T ₂₈₉ 389 (PT-289)	T ₂₉₀ 390 (PT-290)	T ₂₉₁ 391 (PT-291)	T ₂₉₂ 392 (PT-292)	T ₂₉₃ 393 (PT-293)	T ₂₉₄ 394 (PT-294)	T ₂₉₅ 395 (PT-295)	T ₂₉₆ 396 (PT-296)	T ₂₉₇ 397 (PT-297)	T ₂₉₈ 398 (PT-298)	T ₂₉₉ 399 (PT-299)	T ₃₀₀ 400 (PT-300)	T ₃₀₁ 401 (PT-301)	T ₃₀₂ 402 (PT-302)	T ₃₀₃ 403 (PT-303)	T ₃₀₄ 404 (PT-304)	T ₃₀₅ 405 (PT-305)	T ₃₀₆ 406 (PT-306)	T ₃₀₇ 407 (PT-307)	T ₃₀₈ 408 (PT-308)	T ₃₀₉ 409 (PT-309)	T ₃₁₀ 410 (PT-310)	T ₃₁₁ 411 (PT-311)	T ₃₁₂ 412 (PT-312)	T ₃₁₃ 413 (PT-313)	T ₃₁₄ 414 (PT-314)	T ₃₁₅ 415 (PT-315)	T ₃₁₆ 416 (PT-316)	T ₃₁₇ 417 (PT-317)	T ₃₁₈ 418 (PT-318)	T ₃₁₉ 419 (PT-319)	T ₃₂₀ 420 (PT-320)	T ₃₂₁ 421 (PT-321)	T ₃₂₂ 422 (PT-322)	T ₃₂₃ 423 (PT-323)	T ₃₂₄ 424 (PT-324)	T ₃₂₅ 425 (PT-325)	T ₃₂₆ 426 (PT-326)	T ₃₂₇ 427 (PT-327)	T ₃₂₈ 428 (PT-328)	T ₃₂₉ 429 (PT-329)	T ₃₃₀ 430 (PT-330)	T ₃₃₁ 431 (PT-331)	T ₃₃₂ 432 (PT-332)	T ₃₃₃ 433 (PT-333)	T ₃₃₄ 434 (PT-334)	T ₃₃₅ 435 (PT-335)	T ₃₃₆ 436 (PT-336)	T ₃₃₇ 437 (PT-337)	T ₃₃₈ 438 (PT-338)	T ₃₃₉ 439 (PT-339)	T ₃₄₀ 440 (PT-340)	T ₃₄₁ 441 (PT-341)	T ₃₄₂ 442 (PT-342)	T ₃₄₃ 443 (PT-343)	T ₃₄₄ 444 (PT-344)	T ₃₄₅ 445 (PT-345)	T ₃₄₆ 446 (PT-346)	T ₃₄₇ 447 (PT-347)	T ₃₄₈ 448 (PT-348)	T ₃₄₉ 449 (PT-349)	T ₃₅₀ 450 (PT-350)	T ₃₅₁ 451 (PT-351)	T ₃₅₂ 452 (PT-352)	T ₃₅₃ 453 (PT-353)	T ₃₅₄ 454 (PT-354)	T ₃₅₅ 455 (PT-355)	T ₃₅₆ 456 (PT-356)	T ₃₅₇ 457 (PT-357)	T ₃₅₈ 458 (PT-358)	T ₃₅₉ 459 (PT-359)	T ₃₆₀ 460 (PT-360)	T ₃₆₁ 461 (PT-361)	T ₃₆₂ 462 (PT-362)	T ₃₆₃ 463 (PT-363)	T ₃₆₄ 464 (PT-364)	T ₃₆₅ 465 (PT-365)	T ₃₆₆ 466 (PT-366)	T ₃₆₇ 467 (PT-367)	T ₃₆₈ 468 (PT-368)	T ₃₆₉ 469 (PT-369)	T ₃₇₀ 470 (PT-370)	T ₃₇₁ 471 (PT-371)	T ₃₇₂ 472 (PT-372)	T ₃₇₃ 473 (PT-373)	T ₃₇₄ 474 (PT-374)	T ₃₇₅ 475 (PT-375)	T ₃₇₆ 476 (PT-376)	T ₃₇₇ 477 (PT-377)	T ₃₇₈ 478 (PT-378)	T ₃₇₉ 479 (PT-379)	T ₃₈₀ 480 (PT-380)	T ₃₈₁ 481 (PT-381)	T ₃₈₂ 482 (PT-382)	T ₃₈₃ 483 (PT-383)	T ₃₈₄ 484 (PT-384)	T ₃₈₅ 485 (PT-385)	T ₃₈₆ 486 (PT-386)	T ₃₈₇ 487 (PT-387)	T ₃₈₈ 488 (PT-388)	T ₃₈₉ 489 (PT-389)	T ₃₉₀ 490 (PT-390)	T ₃₉₁ 491 (PT-391)	T ₃₉₂ 492 (PT-392)	T ₃₉₃ 493 (PT-393)	T ₃₉₄ 494 (PT-394)	T ₃₉₅ 495 (PT-395)	T ₃₉₆ 496 (PT-396)	T ₃₉₇ 497 (PT-397)	T ₃₉₈ 498 (PT-398)	T ₃₉₉ 499 (PT-399)	T ₄₀₀ 500 (PT-400)	T ₄₀₁ 501 (PT-401)	T ₄₀₂ 502 (PT-402)	T ₄₀₃ 503 (PT-403)	T ₄₀₄ 504 (PT-404)	T ₄₀₅ 505 (PT-405)	T ₄₀₆ 506 (PT-406)	T ₄₀₇ 507 (PT-407)	T ₄₀₈ 508 (PT-408)	T ₄₀₉ 509 (PT-409)	T ₄₁₀ 510 (PT-410)	T ₄₁₁ 511 (PT-411)	T ₄₁₂ 512 (PT-412)	T ₄₁₃ 513 (PT-413)	T ₄₁₄ 514 (PT-414)	T ₄₁₅ 515 (PT-415)	T ₄₁₆ 516 (PT-416)	T ₄₁₇ 517 (PT-417)	T ₄₁₈ 518 (PT-418)	T ₄₁₉ 519 (PT-419)	T ₄₂₀ 520 (PT-420)	T ₄₂₁ 521 (PT-421)	T ₄₂₂ 522 (PT-422)	T ₄₂₃ 523 (PT-423)	T ₄₂₄ 524 (PT-424)	T ₄₂₅ 525 (PT-425)	T ₄₂₆ 526 (PT-426)	T ₄₂₇ 527 (PT-427)	T ₄₂₈ 528 (PT-428)	T ₄₂₉ 529 (PT-429)	T ₄₃₀ 530 (PT-430)	T ₄₃₁ 531 (PT-431)	T ₄₃₂ 532 (PT-432)	T ₄₃₃ 533 (PT-433)	T ₄₃₄ 534 (PT-434)	T ₄₃₅ 535 (PT-435)	T ₄₃₆ 536 (PT-436)	T ₄₃₇ 537 (PT-437)	T ₄₃₈ 538 (PT-438)	T ₄₃₉ 539 (PT-439)	T ₄₄₀ 540 (PT-440)	T ₄₄₁ 541 (PT-441)	T ₄₄₂ 542 (PT-442)	T ₄₄₃ 543 (PT-443)	T ₄₄₄ 544 (PT-444)	T ₄₄₅ 545 (PT-445)	T ₄₄₆ 546 (PT-446)	T ₄₄₇ 547 (PT-447)	T ₄₄₈ 548 (PT-448)	T ₄₄₉ 549 (PT-449)	T ₄₅₀ 550 (PT-450)	T ₄₅₁ 551 (PT-451)	T ₄₅₂ 552 (PT-452)	T ₄₅₃ 553 (PT-453)	T ₄₅₄ 554 (PT-454)	T ₄₅₅ 555 (PT-455)

NOTE: take avg. 80-85% solids and 60% vol. lbs.

71 ROUTE 209 SOUTH SOMERVILLE, NEW JERSEY 08080
TELEPHONE 201-722-0888

BUCKMAN SEWAGE TREATMENT PLANT, JACKSONVILLE, FLA.

SWT. 1.00%

REF. NO. 250495.

OPERATIONS LOG.

DATE: 5/1/87

INCINERATOR No. 2

LINE NR.	CENTRIFUG NO.	TOTAL FEED WGL-130	AVG. Tons / hr	TH 101 (PT-0)	TH 102 (PT-0)	TH 103 (PT-0)	TH 104 (PT-0)	TH 105 (PT-0)	TH 106 (PT-0)	TH 107 (PT-0)	TH 108 (PT-0)	TH 109 (PT-0)	TH 110 (PT-0)	TH 111 (PT-0)	TH 112 (PT-0)	TH 113 (PT-0)	TH 114 (PT-0)	TH 115 (PT-0)	TH 116 (PT-0)	TH 117 (PT-0)	TH 118 (PT-0)	TH 119 (PT-0)	TH 120 (PT-0)	TH 121 (PT-0)	TH 122 (PT-0)	TH 123 (PT-0)	TH 124 (PT-0)	TH 125 (PT-0)	TH 126 (PT-0)	TH 127 (PT-0)	TH 128 (PT-0)	TH 129 (PT-0)	TH 130 (PT-0)	TH 131 (PT-0)	TH 132 (PT-0)	TH 133 (PT-0)	TH 134 (PT-0)	TH 135 (PT-0)	TH 136 (PT-0)	TH 137 (PT-0)	TH 138 (PT-0)	TH 139 (PT-0)	TH 140 (PT-0)	TH 141 (PT-0)	TH 142 (PT-0)	TH 143 (PT-0)	TH 144 (PT-0)	TH 145 (PT-0)	TH 146 (PT-0)	TH 147 (PT-0)	TH 148 (PT-0)	TH 149 (PT-0)	TH 150 (PT-0)	TH 151 (PT-0)	TH 152 (PT-0)	TH 153 (PT-0)	TH 154 (PT-0)	TH 155 (PT-0)	TH 156 (PT-0)	TH 157 (PT-0)	TH 158 (PT-0)	TH 159 (PT-0)	TH 160 (PT-0)	TH 161 (PT-0)	TH 162 (PT-0)	TH 163 (PT-0)	TH 164 (PT-0)	TH 165 (PT-0)	TH 166 (PT-0)	TH 167 (PT-0)	TH 168 (PT-0)	TH 169 (PT-0)	TH 170 (PT-0)	TH 171 (PT-0)	TH 172 (PT-0)	TH 173 (PT-0)	TH 174 (PT-0)	TH 175 (PT-0)	TH 176 (PT-0)	TH 177 (PT-0)	TH 178 (PT-0)	TH 179 (PT-0)	TH 180 (PT-0)	TH 181 (PT-0)	TH 182 (PT-0)	TH 183 (PT-0)	TH 184 (PT-0)	TH 185 (PT-0)	TH 186 (PT-0)	TH 187 (PT-0)	TH 188 (PT-0)	TH 189 (PT-0)	TH 190 (PT-0)	TH 191 (PT-0)	TH 192 (PT-0)	TH 193 (PT-0)	TH 194 (PT-0)	TH 195 (PT-0)	TH 196 (PT-0)	TH 197 (PT-0)	TH 198 (PT-0)	TH 199 (PT-0)	TH 200 (PT-0)	TH 201 (PT-0)	TH 202 (PT-0)	TH 203 (PT-0)	TH 204 (PT-0)	TH 205 (PT-0)	TH 206 (PT-0)	TH 207 (PT-0)	TH 208 (PT-0)	TH 209 (PT-0)	TH 210 (PT-0)	TH 211 (PT-0)	TH 212 (PT-0)	TH 213 (PT-0)	TH 214 (PT-0)	TH 215 (PT-0)	TH 216 (PT-0)	TH 217 (PT-0)	TH 218 (PT-0)	TH 219 (PT-0)	TH 220 (PT-0)	TH 221 (PT-0)	TH 222 (PT-0)	TH 223 (PT-0)	TH 224 (PT-0)	TH 225 (PT-0)	TH 226 (PT-0)	TH 227 (PT-0)	TH 228 (PT-0)	TH 229 (PT-0)	TH 230 (PT-0)	TH 231 (PT-0)	TH 232 (PT-0)	TH 233 (PT-0)	TH 234 (PT-0)	TH 235 (PT-0)	TH 236 (PT-0)	TH 237 (PT-0)	TH 238 (PT-0)	TH 239 (PT-0)	TH 240 (PT-0)	TH 241 (PT-0)	TH 242 (PT-0)	TH 243 (PT-0)	TH 244 (PT-0)	TH 245 (PT-0)	TH 246 (PT-0)	TH 247 (PT-0)	TH 248 (PT-0)	TH 249 (PT-0)	TH 250 (PT-0)	TH 251 (PT-0)	TH 252 (PT-0)	TH 253 (PT-0)	TH 254 (PT-0)	TH 255 (PT-0)	TH 256 (PT-0)	TH 257 (PT-0)	TH 258 (PT-0)	TH 259 (PT-0)	TH 260 (PT-0)	TH 261 (PT-0)	TH 262 (PT-0)	TH 263 (PT-0)	TH 264 (PT-0)	TH 265 (PT-0)	TH 266 (PT-0)	TH 267 (PT-0)	TH 268 (PT-0)	TH 269 (PT-0)	TH 270 (PT-0)	TH 271 (PT-0)	TH 272 (PT-0)	TH 273 (PT-0)	TH 274 (PT-0)	TH 275 (PT-0)	TH 276 (PT-0)	TH 277 (PT-0)	TH 278 (PT-0)	TH 279 (PT-0)	TH 280 (PT-0)	TH 281 (PT-0)	TH 282 (PT-0)	TH 283 (PT-0)	TH 284 (PT-0)	TH 285 (PT-0)	TH 286 (PT-0)	TH 287 (PT-0)	TH 288 (PT-0)	TH 289 (PT-0)	TH 290 (PT-0)	TH 291 (PT-0)	TH 292 (PT-0)	TH 293 (PT-0)	TH 294 (PT-0)	TH 295 (PT-0)	TH 296 (PT-0)	TH 297 (PT-0)	TH 298 (PT-0)	TH 299 (PT-0)	TH 300 (PT-0)	TH 301 (PT-0)	TH 302 (PT-0)	TH 303 (PT-0)	TH 304 (PT-0)	TH 305 (PT-0)	TH 306 (PT-0)	TH 307 (PT-0)	TH 308 (PT-0)	TH 309 (PT-0)	TH 310 (PT-0)	TH 311 (PT-0)	TH 312 (PT-0)	TH 313 (PT-0)	TH 314 (PT-0)	TH 315 (PT-0)	TH 316 (PT-0)	TH 317 (PT-0)	TH 318 (PT-0)	TH 319 (PT-0)	TH 320 (PT-0)	TH 321 (PT-0)	TH 322 (PT-0)	TH 323 (PT-0)	TH 324 (PT-0)	TH 325 (PT-0)	TH 326 (PT-0)	TH 327 (PT-0)	TH 328 (PT-0)	TH 329 (PT-0)	TH 330 (PT-0)	TH 331 (PT-0)	TH 332 (PT-0)	TH 333 (PT-0)	TH 334 (PT-0)	TH 335 (PT-0)	TH 336 (PT-0)	TH 337 (PT-0)	TH 338 (PT-0)	TH 339 (PT-0)	TH 340 (PT-0)	TH 341 (PT-0)	TH 342 (PT-0)	TH 343 (PT-0)	TH 344 (PT-0)	TH 345 (PT-0)	TH 346 (PT-0)	TH 347 (PT-0)	TH 348 (PT-0)	TH 349 (PT-0)	TH 350 (PT-0)	TH 351 (PT-0)	TH 352 (PT-0)	TH 353 (PT-0)	TH 354 (PT-0)	TH 355 (PT-0)	TH 356 (PT-0)	TH 357 (PT-0)	TH 358 (PT-0)	TH 359 (PT-0)	TH 360 (PT-0)	TH 361 (PT-0)	TH 362 (PT-0)	TH 363 (PT-0)	TH 364 (PT-0)	TH 365 (PT-0)	TH 366 (PT-0)	TH 367 (PT-0)	TH 368 (PT-0)	TH 369 (PT-0)	TH 370 (PT-0)	TH 371 (PT-0)	TH 372 (PT-0)	TH 373 (PT-0)	TH 374 (PT-0)	TH 375 (PT-0)	TH 376 (PT-0)	TH 377 (PT-0)	TH 378 (PT-0)	TH 379 (PT-0)	TH 380 (PT-0)	TH 381 (PT-0)	TH 382 (PT-0)	TH 383 (PT-0)	TH 384 (PT-0)	TH 385 (PT-0)	TH 386 (PT-0)	TH 387 (PT-0)	TH 388 (PT-0)	TH 389 (PT-0)	TH 390 (PT-0)	TH 391 (PT-0)	TH 392 (PT-0)	TH 393 (PT-0)	TH 394 (PT-0)	TH 395 (PT-0)	TH 396 (PT-0)	TH 397 (PT-0)	TH 398 (PT-0)	TH 399 (PT-0)	TH 400 (PT-0)	TH 401 (PT-0)	TH 402 (PT-0)	TH 403 (PT-0)	TH 404 (PT-0)	TH 405 (PT-0)	TH 406 (PT-0)	TH 407 (PT-0)	TH 408 (PT-0)	TH 409 (PT-0)	TH 410 (PT-0)	TH 411 (PT-0)	TH 412 (PT-0)	TH 413 (PT-0)	TH 414 (PT-0)	TH 415 (PT-0)	TH 416 (PT-0)	TH 417 (PT-0)	TH 418 (PT-0)	TH 419 (PT-0)	TH 420 (PT-0)	TH 421 (PT-0)	TH 422 (PT-0)	TH 423 (PT-0)	TH 424 (PT-0)	TH 425 (PT-0)	TH 426 (PT-0)	TH 427 (PT-0)	TH 428 (PT-0)	TH 429 (PT-0)	TH 430 (PT-0)	TH 431 (PT-0)	TH 432 (PT-0)	TH 433 (PT-0)	TH 434 (PT-0)	TH 435 (PT-0)	TH 436 (PT-0)	TH 437 (PT-0)	TH 438 (PT-0)	TH 439 (PT-0)	TH 440 (PT-0)	TH 441 (PT-0)	TH 442 (PT-0)	TH 443 (PT-0)	TH 444 (PT-0)	TH 445 (PT-0)	TH 446 (PT-0)	TH 447 (PT-0)	TH 448 (PT-0)	TH 449 (PT-0)	TH 450 (PT-0)	TH 451 (PT-0)	TH 452 (PT-0)	TH 453 (PT-0)	TH 454 (PT-0)	TH 455 (PT-0)	TH 456 (PT-0)	TH 457 (PT-0)	TH 458 (PT-0)	TH 459 (PT-0)	TH 460 (PT-0)	TH 461 (PT-0)	TH 462 (PT-0)	TH 463 (PT-0)	TH 464 (PT-0)	TH 465 (PT-0)	TH 466 (PT-0)	TH 467 (PT-0)	TH 468 (PT-0)	TH 469 (PT-0)	TH 470 (PT-0)	TH 471 (PT-0)	TH 472 (PT-0)	TH 473 (PT-0)	TH 474 (PT-0)	TH 475 (PT-0)	TH 476 (PT-0)	TH 477 (PT-0)	TH 478 (PT-0)	TH 479 (PT-0)	TH 480 (PT-0)	TH 481 (PT-0)	TH 482 (PT-0)	TH 483 (PT-0)	TH 484 (PT-0)	TH 485 (PT-0)	TH 486 (PT-0)	TH 487 (PT-0)	TH 488 (PT-0)	TH 489 (PT-0)	TH 490 (PT-0)	TH 491 (PT-0)	TH 492 (PT-0)	TH 493 (PT-0)	TH 494 (PT-0)	TH 495 (PT-0)	TH 496 (PT-0)	TH 497 (PT-0)	TH 498 (PT-0)	TH 499 (PT-0)	TH 500 (PT-0)	TH 501 (PT-0)	TH 502 (PT-0)	TH 503 (PT-0)	TH 504 (PT-0)	TH 505 (PT-0)	TH 506 (PT-0)	TH 507 (PT-0)	TH 508 (PT-0)	TH 509 (PT-0)	TH 510 (PT-0)	TH 511 (PT-0)	TH 512 (PT-0)	TH 513 (PT-0)	TH 514 (PT-0)	TH 515 (PT-0)	TH 516 (PT-0)	TH 517 (PT-0)	TH 518 (PT-0)	TH 519 (PT-0)	TH 520 (PT-0)	TH 521 (PT-0)	TH 522 (PT-0)	TH 523 (PT-0)	TH 524 (PT-0)	TH 525 (PT-0)	TH 526 (PT-0)	TH 527 (PT-0)	TH 528 (PT-0)	TH 529 (PT-0)	TH 530 (PT-0)	TH 531 (PT-0)	TH 532 (PT-0)	TH 533 (PT-0)	TH 534 (PT-0)	TH 535 (PT-0)	TH 536 (PT-0)	TH 537 (PT-0)	TH 538 (PT-0)	TH 539 (PT-0)	TH 540 (PT-0)	TH 541 (PT-0)	TH 542 (PT-0)	TH 543 (PT-0)	TH 544 (PT-0)	TH 545 (PT-0)	TH 546 (PT-0)	TH 547 (PT-0)	TH 548 (PT-0)	TH 549 (PT-0)	TH 550 (PT-0)	TH 551 (PT-0)	TH 552 (PT-0)	TH 553 (PT-0)	TH 554 (PT-0)	TH 555 (PT-0)	TH 556 (PT-0)	TH 557 (PT-0)	TH 558 (PT-0)	TH 559 (PT-0)	TH 560 (PT-0)	TH 561 (PT-0)	TH 562 (PT-0)	TH 563 (PT-0)	TH 564 (PT-0)	TH 565 (PT-0)	TH 566 (PT-0)	TH 567 (PT-0)	TH 568 (PT-0)	TH 569 (PT-0)	TH 570 (PT-0)	TH 571 (PT-0)	TH 572 (PT-0)	TH 573 (PT-0)	TH 574 (PT-0)	TH 575 (PT-0)	TH 576 (PT-0)	TH 577 (PT-0)	TH 578 (PT-0)	TH 579 (PT-0)	TH 580 (PT-0)	TH 581 (PT-0)	TH 582 (PT-0)	TH 583 (PT-0)	TH 584 (PT-0)	TH 585 (PT-0)	TH 586 (PT-0)	TH 587 (PT-0)	TH 588 (PT-0)	TH 589 (PT-0)	TH 590 (PT-0)	TH 591 (PT-0)	TH 592 (PT-0)	TH 593 (PT-0)	TH 594 (PT-0)	TH 595 (PT-0)	TH 596 (PT-0)	TH 597 (PT-0)	TH 598 (PT-0)	TH 599 (PT-0)	TH 600 (PT-0)	TH 601 (PT-0)	TH 602 (PT-0)	TH 603 (PT-0)	TH 604 (PT-0)	TH 605 (PT-0)	TH 606 (PT-0)	TH 607 (PT-0)	TH 608 (PT-0)	TH 609 (PT-0)	TH 610 (PT-0)	TH 611 (PT-0)	TH 612 (PT-0)	TH 613 (PT-0)	TH 614 (PT-0)	TH 615 (PT-0)	TH 616 (PT-0)	TH 617 (PT-0)	TH 618 (PT-0)	TH 619 (PT-0)	TH 620 (PT-0)	TH 621 (PT-0)	TH 622 (PT-0)	TH 623 (PT-0)	TH 624 (PT-0)	TH 625 (PT-0)	TH 626 (PT-0)	TH 627 (PT-0)	TH 628 (PT-0)	TH 629 (PT-0)	TH 630 (PT-0)	TH 631 (PT-0)	TH 632 (PT-0)	TH 633 (PT-0)	TH 634 (PT-0)	TH 635 (PT-0)	TH 636 (PT-0)	TH 637 (PT-0)	TH 638 (PT-0)	TH 639 (PT-0)	TH 640 (PT-0)	TH 641 (PT-0)	TH 642 (PT-0)	TH 643 (PT-0)	TH 644 (PT-0)	TH 645 (PT-0)	TH 646 (PT-0)	TH 647 (PT-0)	TH 648 (PT-0)	TH 649 (PT-0)	TH 650 (PT-0)	TH 651 (PT-0)	TH 652 (PT-0)	TH 653 (PT-0)	TH 654 (PT-0)	TH 655 (PT-0)	TH 656 (PT-0)	TH 657 (PT-0)	TH 658 (PT-0)	TH 659 (PT-0)	TH 660 (PT-0)	TH 661 (PT-0)	TH 662 (PT-0)	TH 663 (PT-0)	TH 664 (PT-0)	TH 665 (PT-0)	TH 666 (PT-0)	TH 667 (PT-0)	TH 668 (PT-0)	TH 669 (PT-0)	TH 670 (PT-0)	TH 671 (PT-0)	TH 672 (PT-0)	TH 673 (PT-0)	TH 674 (PT-0)	TH 675 (PT-0)	TH 676 (PT-0)	TH 677 (PT-0)	TH 678 (PT-0)	TH 679 (PT-0)	TH 680 (PT-0)	TH 681 (PT-0)	TH 682 (PT-0)	TH 683 (PT-0)	TH 684 (PT-0)	TH 685 (PT-0)	TH 686 (PT-0)	TH 687 (PT-0)	TH 688 (PT-0)	TH 689 (PT-0)	TH 690 (PT-0)	TH 691 (PT-0)	TH 692 (PT-0)	TH 693 (PT-0)	TH 694 (PT-0)	TH 695 (PT-0)	TH 696 (PT-0)	TH 697 (PT-0)	TH 698 (PT-0)	TH 699 (PT-0)	TH 700 (PT-0)	TH 701 (PT-0)	TH 702 (PT-0)	TH 703 (PT-0)	TH 704 (PT-0)	TH 705 (PT-0)	TH 706 (PT-0)	TH 707 (PT-0)	TH 708 (PT-0)	TH 709 (PT-0)	TH 710 (PT-0)	TH 711 (PT-0)	TH 712 (PT-0)	TH 713 (PT-0)	TH 714 (PT-0)	TH 715 (PT-0)	TH 716 (PT-0)	TH 717 (PT-0)	TH 718 (PT-0)	TH 719 (PT-0)	TH 720 (PT-0)	TH 721 (PT-0)	TH 722 (PT-0)	TH 723 (PT-0)	TH 724 (PT-0)	TH 725 (PT-0)	TH 726 (PT-0)	TH

71 ROUTE 200 SOUTH SOMERVILLE, NEW JERSEY 08068
 TELEPHONE 201-722-6808

HUCKMAN SEWAGE TREATMENT PLANT, JACKSONVILLE, FLA.
 REF. NO. 258405

SHT. 1 OF 1

OPERATIONS LOG

DATE: 5/1/87

INCUBATOR No. 2

LINE NO.		CENTRIFUGE NO.		TOTAL POUND WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
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MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
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MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	
MR.		Z		WAT-130		TOLAC		TEMPERATURE												FUMES		VEIN		SCUR		DEM		I.D.		ANAL		INCUBATOR NO.2	

Standard operating & increased feed to 200 gpm @ 14:45.

[illegible]

71 ROUTE 200 SOUTH SOMERVILLE, NEW JERSEY 08049
TELEPHONE 201-723-0805

BUCKMAN SEWAGE TREATMENT PLANT, JACKSONVILLE, FLA.

SMT 1.00

REF. NO. 258405

OPERATIONS LOG

DATE: 5/6/87

INCINERATOR NO. 2

TIME HR.	CENTRIFUGE NO.	TOTAL PUMP WQ-190	TOTA TOTA	TEMPERATURE										FUELS										INCINERATOR NO. 2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
				101 (T-1)	102 (T-2)	103 (T-3)	104 (T-4)	105 (T-5)	106 (T-6)	107 (T-7)	108 (T-8)	109 (T-9)	110 (T-10)	111 (T-11)	112 (T-12)	113 (T-13)	114 (T-14)	115 (T-15)	116 (T-16)	117 (T-17)	118 (T-18)	119 (T-19)	120 (T-20)	121 (T-21)	122 (T-22)	123 (T-23)	124 (T-24)	125 (T-25)	126 (T-26)	127 (T-27)	128 (T-28)	129 (T-29)	130 (T-30)	131 (T-31)	132 (T-32)	133 (T-33)	134 (T-34)	135 (T-35)	136 (T-36)	137 (T-37)	138 (T-38)	139 (T-39)	140 (T-40)	141 (T-41)	142 (T-42)	143 (T-43)	144 (T-44)	145 (T-45)	146 (T-46)	147 (T-47)	148 (T-48)	149 (T-49)	150 (T-50)	151 (T-51)	152 (T-52)	153 (T-53)	154 (T-54)	155 (T-55)	156 (T-56)	157 (T-57)	158 (T-58)	159 (T-59)	160 (T-60)	161 (T-61)	162 (T-62)	163 (T-63)	164 (T-64)	165 (T-65)	166 (T-66)	167 (T-67)	168 (T-68)	169 (T-69)	170 (T-70)	171 (T-71)	172 (T-72)	173 (T-73)	174 (T-74)	175 (T-75)	176 (T-76)	177 (T-77)	178 (T-78)	179 (T-79)	180 (T-80)	181 (T-81)	182 (T-82)	183 (T-83)	184 (T-84)	185 (T-85)	186 (T-86)	187 (T-87)	188 (T-88)	189 (T-89)	190 (T-90)	191 (T-91)	192 (T-92)	193 (T-93)	194 (T-94)	195 (T-95)	196 (T-96)	197 (T-97)	198 (T-98)	199 (T-99)	200 (T-100)	201 (T-101)	202 (T-102)	203 (T-103)	204 (T-104)	205 (T-105)	206 (T-106)	207 (T-107)	208 (T-108)	209 (T-109)	210 (T-110)	211 (T-111)	212 (T-112)	213 (T-113)	214 (T-114)	215 (T-115)	216 (T-116)	217 (T-117)	218 (T-118)	219 (T-119)	220 (T-120)	221 (T-121)	222 (T-122)	223 (T-123)	224 (T-124)	225 (T-125)	226 (T-126)	227 (T-127)	228 (T-128)	229 (T-129)	230 (T-130)	231 (T-131)	232 (T-132)	233 (T-133)	234 (T-134)	235 (T-135)	236 (T-136)	237 (T-137)	238 (T-138)	239 (T-139)	240 (T-140)	241 (T-141)	242 (T-142)	243 (T-143)	244 (T-144)	245 (T-145)	246 (T-146)	247 (T-147)	248 (T-148)	249 (T-149)	250 (T-150)	251 (T-151)	252 (T-152)	253 (T-153)	254 (T-154)	255 (T-155)	256 (T-156)	257 (T-157)	258 (T-158)	259 (T-159)	260 (T-160)	261 (T-161)	262 (T-162)	263 (T-163)	264 (T-164)	265 (T-165)	266 (T-166)	267 (T-167)	268 (T-168)	269 (T-169)	270 (T-170)	271 (T-171)	272 (T-172)	273 (T-173)	274 (T-174)	275 (T-175)	276 (T-176)	277 (T-177)	278 (T-178)	279 (T-179)	280 (T-180)	281 (T-181)	282 (T-182)	283 (T-183)	284 (T-184)	285 (T-185)	286 (T-186)	287 (T-187)	288 (T-188)	289 (T-189)	290 (T-190)	291 (T-191)	292 (T-192)	293 (T-193)	294 (T-194)	295 (T-195)	296 (T-196)	297 (T-197)	298 (T-198)	299 (T-199)	300 (T-200)	301 (T-201)	302 (T-202)	303 (T-203)	304 (T-204)	305 (T-205)	306 (T-206)	307 (T-207)	308 (T-208)	309 (T-209)	310 (T-210)	311 (T-211)	312 (T-212)	313 (T-213)	314 (T-214)	315 (T-215)	316 (T-216)	317 (T-217)	318 (T-218)	319 (T-219)	320 (T-220)	321 (T-221)	322 (T-222)	323 (T-223)	324 (T-224)	325 (T-225)	326 (T-226)	327 (T-227)	328 (T-228)	329 (T-229)	330 (T-230)	331 (T-231)	332 (T-232)	333 (T-233)	334 (T-234)	335 (T-235)	336 (T-236)	337 (T-237)	338 (T-238)	339 (T-239)	340 (T-240)	341 (T-241)	342 (T-242)	343 (T-243)	344 (T-244)	345 (T-245)	346 (T-246)	347 (T-247)	348 (T-248)	349 (T-249)	350 (T-250)	351 (T-251)	352 (T-252)	353 (T-253)	354 (T-254)	355 (T-255)	356 (T-256)	357 (T-257)	358 (T-258)	359 (T-259)	360 (T-260)	361 (T-261)	362 (T-262)	363 (T-263)	364 (T-264)	365 (T-265)	366 (T-266)	367 (T-267)	368 (T-268)	369 (T-269)	370 (T-270)	371 (T-271)	372 (T-272)	373 (T-273)	374 (T-274)	375 (T-275)	376 (T-276)	377 (T-277)	378 (T-278)	379 (T-279)	380 (T-280)	381 (T-281)	382 (T-282)	383 (T-283)	384 (T-284)	385 (T-285)	386 (T-286)	387 (T-287)	388 (T-288)	389 (T-289)	390 (T-290)	391 (T-291)	392 (T-292)	393 (T-293)	394 (T-294)	395 (T-295)	396 (T-296)	397 (T-297)	398 (T-298)	399 (T-299)	400 (T-300)	401 (T-301)	402 (T-302)	403 (T-303)	404 (T-304)	405 (T-305)	406 (T-306)	407 (T-307)	408 (T-308)	409 (T-309)	410 (T-310)	411 (T-311)	412 (T-312)	413 (T-313)	414 (T-314)	415 (T-315)	416 (T-316)	417 (T-317)	418 (T-318)	419 (T-319)	420 (T-320)	421 (T-321)	422 (T-322)	423 (T-323)	424 (T-324)	425 (T-325)	426 (T-326)	427 (T-327)	428 (T-328)	429 (T-329)	430 (T-330)	431 (T-331)	432 (T-332)	433 (T-333)	434 (T-334)	435 (T-335)	436 (T-336)	437 (T-337)	438 (T-338)	439 (T-339)	440 (T-340)	441 (T-341)	442 (T-342)	443 (T-343)	444 (T-344)	445 (T-345)	446 (T-346)	447 (T-347)	448 (T-348)	449 (T-349)	450 (T-350)	451 (T-351)	452 (T-352)	453 (T-353)	454 (T-354)	455 (T-355)	456 (T-356)	457 (T-357)	458 (T-358)	459 (T-359)	460 (T-360)	461 (T-361)	462 (T-362)	463 (T-363)	464 (T-364)	465 (T-365)	466 (T-366)	467 (T-367)	468 (T-368)	469 (T-369)	470 (T-370)	471 (T-371)	472 (T-372)	473 (T-373)	474 (T-374)	475 (T-375)	476 (T-376)	477 (T-377)	478 (T-378)	479 (T-379)	480 (T-380)	481 (T-381)	482 (T-382)	483 (T-383)	484 (T-384)	485 (T-385)	486 (T-386)	487 (T-387)	488 (T-388)	489 (T-389)	490 (T-390)	491 (T-391)	492 (T-392)	493 (T-393)	494 (T-394)	495 (T-395)	496 (T-396)	497 (T-397)	498 (T-398)	499 (T-399)	500 (T-400)	501 (T-401)	502 (T-402)	503 (T-403)	504 (T-404)	505 (T-405)	506 (T-406)	507 (T-407)	508 (T-408)	509 (T-409)	510 (T-410)	511 (T-411)	512 (T-412)	513 (T-413)	514 (T-414)	515 (T-415)	516 (T-416)	517 (T-417)	518 (T-418)	519 (T-419)	520 (T-420)	521 (T-421)	522 (T-422)	523 (T-423)	524 (T-424)	525 (T-425)	526 (T-426)	527 (T-427)	528 (T-428)	529 (T-429)	530 (T-430)	531 (T-431)	532 (T-432)	533 (T-433)	534 (T-434)	535 (T-435)	536 (T-436)	537 (T-437)	538 (T-438)	539 (T-439)	540 (T-440)	541 (T-441)	542 (T-442)	543 (T-443)	544 (T-444)	545 (T-445)	546 (T-446)	547 (T-447)	548 (T-448)	549 (T-449)	550 (T-450)	551 (T-451)	552 (T-452)	553 (T-453)	554 (T-454)	555 (T-455)	556 (T-456)	557 (T-457)	558 (T-458)	559 (T-459)	560 (T-460)	561 (T-461)	562 (T-462)	563 (T-463)	564 (T-464)	565 (T-465)	566 (T-466)	567 (T-467)	568 (T-468)	569 (T-469)	570 (T-470)	571 (T-471)	572 (T-472)	573 (T-473)	574 (T-474)	575 (T-475)	576 (T-476)	577 (T-477)	578 (T-478)	579 (T-479)	580 (T-480)	581 (T-481)	582 (T-482)	583 (T-483)	584 (T-484)	585 (T-485)	586 (T-486)	587 (T-487)	588 (T-488)	589 (T-489)	590 (T-490)	591 (T-491)	592 (T-492)	593 (T-493)	594 (T-494)	595 (T-495)	596 (T-496)	597 (T-497)	598 (T-498)	599 (T-499)	600 (T-500)	601 (T-501)	602 (T-502)	603 (T-503)	604 (T-504)	605 (T-505)	606 (T-506)	607 (T-507)	608 (T-508)	609 (T-509)	610 (T-510)	611 (T-511)	612 (T-512)	613 (T-513)	614 (T-514)	615 (T-515)	616 (T-516)	617 (T-517)	618 (T-518)	619 (T-519)	620 (T-520)	621 (T-521)	622 (T-522)	623 (T-523)	624 (T-524)	625 (T-525)	626 (T-526)	627 (T-527)	628 (T-528)	629 (T-529)	630 (T-530)	631 (T-531)	632 (T-532)	633 (T-533)	634 (T-534)	635 (T-535)	636 (T-536)	637 (T-537)	638 (T-538)	639 (T-539)	640 (T-540)	641 (T-541)	642 (T-542)	643 (T-543)	644 (T-544)	645 (T-545)	646 (T-546)	647 (T-547)	648 (T-548)	649 (T-549)	650 (T-550)	651 (T-551)	652 (T-552)	653 (T-553)	654 (T-554)	655 (T-555)	656 (T-556)	657 (T-557)	658 (T-558)	659 (T-559)	660 (T-560)	661 (T-561)	662 (T-562)	663 (T-563)	664 (T-564)	665 (T-565)	666 (T-566)	667 (T-567)	668 (T-568)	669 (T-569)	670 (T-570)	671 (T-571)	672 (T-572)	673 (T-573)	674 (T-574)	675 (T-575)	676 (T-576)	677 (T-577)	678 (T-578)	679 (T-579)	680 (T-580)	681 (T-581)	682 (T-582)	683 (T-583)	684 (T-584)	685 (T-585)	686 (T-586)	687 (T-587)	688 (T-588)	689 (T-589)	690 (T-590)	691 (T-591)	692 (T-592)	693 (T-593)	694 (T-594)	695 (T-595)	696 (T-596)	697 (T-597)	698 (T-598)	699 (T-599)	700 (T-600)	701 (T-601)	702 (T-602)	703 (T-603)	704 (T-604)	705 (T-605)	706 (T-606)	707 (T-607)	708 (T-608)	709 (T-609)	710 (T-610)	711 (T-611)	712 (T-612)	713 (T-613)	714 (T-614)	715 (T-615)	716 (T-616)	717 (T-617)	718 (T-618)	719 (T-619)	720 (T-620)	721 (T-621)	722 (T-622)	723 (T-623)	724 (T-624)	725 (T-625)	726 (T-626)	727 (T-627)	728 (T-628)	729 (T-629)	730 (T-630)	731 (T-631)	732 (T-632)	733 (T-633)	734 (T-634)	735 (T-635)	736 (T-636)	737 (T-637)	738 (T-638)	739 (T-639)	740 (T-640)	741 (T-641)	742 (T-642)	743 (T-643)	744 (T-644)	745 (T-645)	746 (T-646)	747 (T-647)	748 (T-648)	749 (T-649)	750 (T-650)	751 (T-651)	752 (T-652)	753 (T-653)	754 (T-654)	755 (T-655)	756 (T-656)	757 (T-657)

TELEPHONE 201-724-0000

FILE No. 258405

OPERATIONS LOG

DATE: 5/12/05

100

511.126

A-11

[illegible]

SMT-100

INCINERATOR No. 2

Diagram 1: Lampen operated to vent

INCINERATOR NO. 2

SHIT. I am

INCH MR.	CENTRIFUGE NO.	TOTAL FEED WAL-130	AUG. Tons/HR	TEMPERATURE - °F												% O ₂	FURN DR A F T	S _H A F T	V E N T U R I E R	S C R U B B E R	D E M I S T E R	I D E A N A M B I E N T	O P E R A T O R N O.
				T ₁	T ₂	T ₃	T ₄	T ₅	T ₆	T ₇	T ₈	T ₉	T ₁₀	T ₁₁	T ₁₂								
				(PT-1)	(PT-2)	(PT-3)	(PT-4)	(PT-5)	(PT-6)	(PT-7)	(PT-8)	(PT-9)	(PT-10)	(PT-11)	(PT-12)								
1035	0	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	1	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	2	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	3	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	4	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	5	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	6	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	7	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	8	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	9	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	10	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	11	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	12	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	13	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	14	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	15	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	16	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	17	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	18	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	19	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
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1035	21	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
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1035	27	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	28	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
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1035	57	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	58	1520820	1.4	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1035	59	1520820																					

71 ROUTE 209 SOUTH, SOMEFVILLE, NEW JERSEY 08886
TELEPHONE 201-722-6965

REF. No. 258405.

OPERATIONS LOG.

DATE: 5/6/87

INCUBATOR NO. 2

SHY. 1 of 2

BUCKMAN SEWAGE TREATMENT PLANT, JACKSONVILLE, FLA.
OPERATIONS LOG

[illegible]

APPENDIX B

SAMPLE CALCULATIONS:

B.1 ISOKINETICS

B.2 EMISSION FACTORS

B.1 ISOKINETICS

RADIAN SOURCE TEST EPA METHODS 2-5 DEFINITION OF TERMS

PARAMETER	DEFINITION
Tt(min.)	TOTAL SAMPLING TIME
Dn(in.)	SAMPLING NOZZLE DIAMETER
Ps(in.H2O)	ABSOLUTE STACK STATIC GAS PRESSURE
Vm(cu.ft.)	ABSOLUTE VOLUME OF GAS SAMPLE MEASURED BY DGM
Vw(gm.)	TOTAL STACK MOISTURE COLLECTED
Pm(in.H2O)	AVERAGE STATIC PRESSURE OF DGM
Tm(F)	AVERAGE TEMPERATURE OF DGM
Pb(in.Hg.)	BAROMETRIC PRESSURE
% CO2	CARBON DIOXIDE CONTENT OF STACK GAS
% O2	OXYGEN CONTENT OF STACK GAS
% N2	NITROGEN CONTENT OF STACK GAS
SQR(DELPs)	AVE. SQ. ROOT OF S-PITOT DIFF. PRESSURE-TEMP. PRODU
As(sq.in.)	CROSS-SECTIONAL AREA OF STACK(DUCT)
Ts(F)	TEMPERATURE OF STACK
Vm(dscf)	STANDARD VOLUME OF GAS SAMPLED, Vm(std), AS DRY STD
Vm(dscm)	STANDARD VOLUME OF GAS SAMPLED, Vm(std), AS DRY STD.
Vw gas(scF)	VOLUME OF WATER VAPOR IN GAS SAMPLE, STD
% moisture	WATER VAPOR COMPOSITION OF STACK GAS
Md	PROPORTION, BY VOLUME, OF DRY GAS IN GAS SAMPLE
MWd	MOLECULAR WEIGHT OF STACK GAS, DRY BASIS LB/LB-MOLE
MW	MOLECULAR WEIGHT OF STACK GAS, WET BASIC LB/LB-MOLE
Vs(fpm)	AVERAGE STACK GAS VELOCITY
Flow(acfm) 10a	AVERAGE STACK GAS FLOW RATE (ACTUAL STACK COND.)
Flow(acmm)	AVERAGE STACK GAS FLOW RATE (ACTUAL STACK COND.)
Flow(dscfm)	AVERAGE STACK GAS VOLUMETRIC FLOW RATE (DRY BASIS)
Flow(dscmm)	AVERAGE STACK GAS VOLUMETRIC FLOW RATE (DRY BASIS)
% I	PERCENT ISOKINETIC
% EA	PERCENT EXCESS AIR IN STACK GAS
DGM	DRY GAS METER
Y	DRY GAS METER CORRECTION FACTOR
Pg	STACK STATIC GAS PRESSURE
Cp	PITOT COEFFICIENT
dH	ORIFICE PLATE DIFF. PRESS. VALUE
dP	PITOT DIFF. PRESS. VALUE

STANDARD TEMPERATURE = 68 deg-F (528 deg-R)
 CORRECTED PRESSURE = 29.92 in. Hg.

**RADIAN SOURCE TEST
EPA METHOD 2-5
SAMPLE CALCULATION**

PLANT :
PLANT SITE :
SAMPLING LOCATION : OUTLET
TEST # : 0503-O-M12S-02
DATE : 5387
TEST PERIOD : 1202-1447

- 1) Volume of dry gas sampled at standard conditions (68 deg-F , 29.92 in. Hg

$$V_m(\text{std}) = \frac{Y \times V_m \times [T(\text{std}) + 460] \times [P_b + (P_m/13.6)]}{P(\text{std}) \times (T_m + 460)}$$

$$V_m(\text{std}) = \frac{1.0051 \times 70.456 \times 528 \times [29.8 + (1.1275 / 13.6)]}{29.92 \times (91.33334 + 460)}$$

$$V_m(\text{std}) = 67.734 \text{ dscf}$$

- 2) Volume of water vapor at standard conditions:

$$V_w(\text{gas}) = 0.04715 \text{ cf/gm} \times W(1) \text{ gm}$$

$$V_w(\text{gas}) = 0.04715 \times 146.6 = 6.912 \text{ scf}$$

- 3) Percent Moisture in stack gas :

$$\%M = \frac{100 \times V_w(\text{gas})}{V_m(\text{std}) + V_w(\text{gas})}$$

$$\%M = \frac{100 \times 6.912}{67.734 + 6.912} = 9.26 \%$$

- 4) Mole fraction of dry stack gas :

$$M_d = \frac{100 - \%M}{100} = \frac{100 - 9.26}{100} = .9074009$$

SAMPLE CALCULATION PAGE TWO

5) Average Molecular Weight of DRY stack gas :

$$MWd = (.44 \times \%CO_2) + (.32 \times \%O_2) + (.28 \times \%N_2)$$

$$MWd = (.44 \times 4) + (.32 \times 15.9) + (.28 \times 80.1) = 29.276$$

6) Average Molecular Weight of wet stack gas :

$$MW = MWd \times Md + 18(1 - Md)$$

$$MW = 29.276 \times .9074009 + 18(1 - .9074009) = 28.23185$$

7) Stack gas velocity in feet-per-minute (fpm) at stack conditions :

$$Vs = Kp \times Cp \times [SQRT(dP)]\{ave\} \times SQRT[Ts\{avg\}] \times SQRT[1/(Ps \times MW)] \times 60 \text{ sec/min}$$

$$Vs = 85.49 \times .84 \times 60 \times 12.67923 \times SQRT[1/(29.82941 \times 28.23185)]$$

$$Vs = 1882.551 \text{ FPM}$$

8) Average stack gas dry volumetric flow rate (DSCFM) :

$$Qsd = \frac{Vs \times As \times Md \times T(std) \times Ps}{144 \text{ cu. in./cu. ft.} \times (Ts + 460) \times P(std)}$$

$$Qsd = \frac{1882.551 \times 1017.878 \times .9074009 \times 528 \times 29.82941}{144 \times 540.125 \times 29.92}$$

$$Qsd = 11347.79 \text{ dscfm}$$

SAMPLE CALCULATION PAGE THREE

9) Isokinetic sampling rate (%) :

Dimensional Constant C = $K_4 \times 60 \times 144 \times [1 / (P_1 / 4)]$
 $K_4 = .0945$ FOR ENGLISH UNITS

$$IX = \frac{C \times V_m(\text{std}) \times (T_s + 460)}{V_s \times T_t \times P_s \times M_d \times (D_n)^2}$$

$$IX = \frac{1039.574 \times 67.73422 \times 560.125}{1882.551 \times 120 \times 29.82941 \times .9074009 \times (.247)^2}$$

$$IX = 105.7263$$

10) Excess air (%) :

$$EA = \frac{100 \times \%O_2}{(.264 \times \%N_2) - \%O_2} = \frac{100 \times 15.9}{(.264 \times 80.1) - 15.9}$$

$$EA = 303.06$$

11) Particulate Concentration :

$$C_s = (\text{grams part.}) / V_m(\text{std}) = .0512 / 67.73422$$

$$C_s = 0.0007559 \text{ Grams/DSCF}$$

$$C_a = \frac{T(\text{std}) \times M_d \times P_s \times C_s}{P(\text{std}) \times T_s}$$

$$C_a = \frac{528 \times .9074009 \times 29.82941 \times 0.0007559}{29.92 \times 560.125 \times 0 ; CV(14)+460}$$

$$C_a = 0.0006446 \text{ Grams/ACF}$$

$$\text{LBS/HR} = C_s \times 0.002205 \times Q_{sd} \times 60$$

$$\text{LBS/HR} = 0.0007559 \times 0.002205 \times 11347.8 \times 60$$

$$\text{LBS/HR} = 1.134835$$

B.2 SAMPLE CALCULATIONS

The following calculations apply to EPA Method 12, semi-volatile, and volatile testing procedures which were conducted at Site 3 of the Sewage Sludge Incineration Study. One sample calculation from each type of test is illustrated. A list of definitions is included for the emission factor calculations.

DEFINITION OF TERMS

<u>Parameter</u>	<u>Definition</u>
C (ug/dscm)	Concentration of Target Compound in the Stack Gas
C (CO ₂) (ug/dscm)	Concentration of Target Compound in the Stack Gas Adjusted to 12% CO ₂
CF	CO ₂ Correction Factor (12%/CO ₂)
% CO ₂	Average Concentration of CO ₂ in the Stack Gas
EF	Emission Factor; Relates Stack Emissions to Feed Rate
ER (mg/hr)	Emission Rate of Target Compound
EV	Emission of Target Compound per Metric Ton of Volatile Solids Fed
Flow (dscmm)	Average Stack Volumetric Flow Rate (Dry Basis)
FS (metric ton/hr)	Average Dry Sludge Feed Rate
M (ug)	Total Amount of Target Compound Detected in Flue Gas Sample
Ms (ng/g)	Total Amount of Target Compound Detected in the Sludge Feed Sample
MSW (ng/l)	Total Amount of Target Compound Detected in the Scrubber Water Feed Sample
P (g)	Total Particulate Catch on the Filter
RMP	Ratio of the Metal Emissions to the Total Particulate Catch
FV (mg/hr)	Volatiles Feed Rate
DVF	Dry Volatiles Sludge Feed Rate
FSV (mg/hr)	Semi-Volatile Feed Rate
FM (mg/hr)	Metal Feed Rate
OSW	Scrubber Water Volumetric Flow Rate
VM (dscm)	Standard Volume of Gas Sampled (Dry Basis)
ER _p	Particulate Emission Rate
EFP _p	Particulate Emission Factor
*** EPA	
Standard Conditions	Temperature = 68 deg ⁰ F (528 deg ⁰ R) Pressure = 29.92 inches of mercury

SAMPLE CALCULATIONS

Plant Site: 2
Sampling Location: Inlet
Date: 4/30/87
Time Period: 14:20 - 16:34

Example #2: Semi-Volatiles; Run #1
Semi-Volatiles: Naphthalene (NA)

- 1) Concentration of semi-volatiles (NA) in the stack gas sampled, (ug/dscm):

$$C = M/VM$$

$$C = 370 \text{ ug}/1.341 \text{ dscm}$$

$$C = 275.9 \text{ ug/dscm}$$

- 2) Concentration of semi-volatiles (NA) in the stack gas sampled corrected to 12% CO₂, (ug/dscm):

$$C (\text{CO}_2) = C * CF (12\% \text{ CO}_2)$$

$$C (\text{CO}_2) = 275.9 \text{ ug/dscm} * 12/8.6$$

$$C (\text{CO}_2) = 197.7 \text{ ug/dscm, adjusted to } 12\% \text{ CO}_2$$

- 3) Emission rates of semi-volatiles (NA), (g/hr):

ER =

ER =

ER =

$$258.12 \text{ dscm} * 60 \text{ min/hr} * \text{g}/10^6 \text{ ug}$$

4) Sludge feed rate, (g/hr):

$$FSV = MS * FS$$

$$FSV = 6600 \text{ ng/g} * 6.82 \text{ ton/hr} * 907.186 \text{ kg/ton} * 10^6 \text{ g/kg} * 10^9 \text{ kg/ng} * 10^{-3} \text{ kg}$$

$$FSV = 43.35 \text{ g/hr}$$

5) Emission factors of semi-volatiles (NA):

$$EF = ER/FS$$

$$EF = 4.27 \text{ g/hr} / 43.35 \text{ g/hr}$$

$$EF = 0.099 \frac{\text{g NA emitted}}{\text{g NA fed}}$$

SAMPLE CALCULATIONS

Plant Site: 2
Sampling Location: Inlet
Date: 4/30/87
Time Period: 14:20 - 16:34

Example #3: VOST; Run #1
Volatile: Chlorobenzene (CB)

- 1) Concentration of volatiles (CB) in the stack gas sampled, (ug/dscm):

$$C = M/V_m$$

$$C = 396.00 \text{ ng}/18.73 \text{ dscm} * 10^3 \text{ ug/mg} * 10^{-3} \text{ ug/dscm}$$

$$C = 21.1 \text{ ug/dscm}$$

- 2) Concentration of volatiles (CB) detected in the stack gas sampled corrected to 12% CO₂, (ug/dscm):

$$C (\text{CO}_2) = C * CF (12\% \text{ CO}_2)$$

$$C (\text{CO}_2) = 21.1 * 12/3.80$$

$$C (\text{CO}_2) = 66.7 \text{ ug/dscm, adjusted to 12\% CO}_2$$

- 3) Dry volatile sludge feed rate (metric ton/hr)

$$\text{DVF} = \% \text{ vol} * \text{FS}$$

$$\text{DVF} = 0.1425 * 748 \text{ metric ton/hr}/1.10156 \text{ ton/metric ton}$$

$$\text{DVF} = 0.938 \text{ metric ton/hr}$$

- 4) Emission of volatiles (CB) per ton of volatile solids feed, (mg/metric ton):

$$\text{EV} = C * \text{Flow}/\text{DVF}$$

$$\text{EV} = 21.1 \text{ ug/dscm} * 258 \text{ dscm}/0.942 * 60 \text{ min/hr} * 10^3 \text{ mg/ug}$$

$$\text{EV} = 346.7 \text{ mg/metric ton}$$

5) Emission rate of volatiles (CB), (g/hr):

$$ER = EV * DVF$$

$$ER = 346.7 \text{ mg/metric ton} * 0.938 \text{ metric ton/hr}$$

$$ER = 0.327 \text{ g/hr}$$

4) Sludge feed rate, (g/hr):

$$FV = MS * FS$$

$$FV = 1100 \text{ ng/g} * 7.24 \text{ ton/hr} * 907.186 \text{ kg/ton} * 10^3 \text{ g/kg} * 10^6 \text{ ug/kg} \\ 10^{-9} \text{ kg/ng}$$

$$FSV = 7.22 \text{ g/hr}$$

5) Emission factors of volatiles (CB) per sludge feed;
($\frac{\text{g volatile emission}}{\text{g sludge feed}}$):

$$EF = ER/FSV$$

$$EF = 0.327 \text{ g/hr} / 7.72 \text{ g/hr}$$

$$EF = 0.045 \frac{\text{g CB Emitted}}{\text{g CB Fed}}$$

VOLUME VII

APPENDIX A
INCINERATOR AND SCRUBBER
OPERATING DATA

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TELEPHONE 201-720000

HUCKMAN SEWAGE TREATMENT PLANT, JACKSONVILLE, FLA. SW-1 OF 2
OPERATIONS LOG. DATE: 4/30/67 INCINERATOR No. 2

TIME HR.	CENTRIFUGE OZ.	TOTAL PAGES WQ1-130	TEMPERATURE	TEMPERATURE										TEMPERATURE										I.D. FAN AMM or IF-304	OPACITY	A-3 FAN A.M.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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2005	1	747327	7.0	139	141	143	145	147	149	151	153	155	157	159	161	163	165	167	169	171	173	175	177	179	181	183	185	187	189	191	193	195	197	199	201	203	205	207	209	211	213	215	217	219	221	223	225	227	229	231	233	235	237	239	241	243	245	247	249	251	253	255	257	259	261	263	265	267	269	271	273	275	277	279	281	283	285	287	289	291	293	295	297	299	301	303	305	307	309	311	313	315	317	319	321	323	325	327	329	331	333	335	337	339	341	343	345	347	349	351	353	355	357	359	361	363	365	367	369	371	373	375	377	379	381	383	385	387	389	391	393	395	397	399	401	403	405	407	409	411	413	415	417	419	421	423	425	427	429	431	433	435	437	439	441	443	445	447	449	451	453	455	457	459	461	463	465	467	469	471	473	475	477	479	481	483	485	487	489	491	493	495	497	499	501	503	505	507	509	511	513	515	517	519	521	523	525	527	529	531	533	535	537	539	541	543	545	547	549	551	553	555	557	559	561	563	565	567	569	571	573	575	577	579	581	583	585	587	589	591	593	595	597	599	601	603	605	607	609	611	613	615	617	619	621	623	625	627	629	631	633	635	637	639	641	643	645	647	649	651	653	655	657	659	661	663	665	667	669	671	673	675	677	679	681	683	685	687	689	691	693	695	697	699	701	703	705	707	709	711	713	715	717	719	721	723	725	727	729	731	733	735	737	739	741	743	745	747	749	751	753	755	757	759	761	763	765	767	769	771	773	775	777	779	781	783	785	787	789	791	793	795	797	799	801	803	805	807	809	811	813	815	817	819	821	823	825	827	829	831	833	835	837	839	841	843	845	847	849	851	853	855	857	859	861	863	865	867	869	871	873	875	877	879	881	883	885	887	889	891	893	895	897	899	901	903	905	907	909	911	913	915	917	919	921	923	925	927	929	931	933	935	937	939	941	943	945	947	949	951	953	955	957	959	961	963	965	967	969	971	973	975	977	979	981	983	985	987	989	991	993	995	997	999	1001	1003	1005	1007	1009	1011	1013	1015	1017	1019	1021	1023	1025	1027	1029	1031	1033	1035	1037	1039	1041	1043	1045	1047	1049	1051	1053	1055	1057	1059	1061	1063	1065	1067	1069	1071	1073	1075	1077	1079	1081	1083	1085	1087	1089	1091	1093	1095	1097	1099	1101	1103	1105	1107	1109	1111	1113	1115	1117	1119	1121	1123	1125	1127	1129	1131	1133	1135	1137	1139	1141	1143	1145	1147	1149	1151	1153	1155	1157	1159	1161	1163	1165	1167	1169	1171	1173	1175	1177	1179	1181	1183	1185	1187	1189	1191	1193	1195	1197	1199	1201	1203	1205	1207	1209	1211	1213	1215	1217	1219	1221	1223	1225	1227	1229	1231	1233	1235	1237	1239	1241	1243	1245	1247	1249	1251	1253	1255	1257	1259	1261	1263	1265	1267	1269	1271	1273	1275	1277	1279	1281	1283	1285	1287	1289	1291	1293	1295	1297	1299	1301	1303	1305	1307	1309	1311	1313	1315	1317	1319	1321	1323	1325	1327	1329	1331	1333	1335	1337	1339	1341	1343	1345	1347	1349	1351	1353	1355	1357	1359	1361	1363	1365	1367	1369	1371	1373	1375	1377	1379	1381	1383	1385	1387	1389	1391	1393	1395	1397	1399	1401	1403	1405	1407	1409	1411	1413	1415	1417	1419	1421	1423	1425	1427	1429	1431	1433	1435	1437	1439	1441	1443	1445	1447	1449	1451	1453	1455	1457	1459	1461	1463	1465	1467	1469	1471	1473	1475	1477	1479	1481	1483	1485	1487	1489	1491	1493	1495	1497	1499	1501	1503	1505	1507	1509	1511	1513	1515	1517	1519	1521	1523	1525	1527	1529	1531	1533	1535	1537	1539	1541	1543	1545	1547	1549	1551	1553	1555	1557	1559	1561	1563	1565	1567	1569	1571	1573	1575	1577	1579	1581	1583	1585	1587	1589	1591	1593	1595	1597	1599	1601	1603	1605	1607	1609	1611	1613	1615	1617	1619	1621	1623	1625	1627	1629	1631	1633	1635	1637	1639	1641	1643	1645	1647	1649	1651	1653	1655	1657	1659	1661	1663	1665	1667	1669	1671	1673	1675	1677	1679	1681	1683	1685	1687	1689	1691	1693	1695	1697	1699	1701	1703	1705	1707	1709	1711	1713	1715	1717	1719	1721	1723	1725	1727	1729	1731	1733	1735	1737	1739	1741	1743	1745	1747	1749	1751	1753	1755	1757	1759	1761	1763	1765	1767	1769	1771	1773	1775	1777	1779	1781	1783	1785	1787	1789	1791	1793	1795	1797	1799	1801	1803	1805	1807	1809	1811	1813	1815	1817	1819	1821	1823	1825	1827	1829	1831	1833	1835	1837	1839	1841	1843	1845	1847	1849	1851	1853	1855	1857	1859	1861	1863	1865	1867	1869	1871	1873	1875	1877	1879	1881	1883	1885	1887	1889	1891	1893	1895	1897	1899	1901	1903	1905	1907	1909	1911	1913	1915	1917	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937	1939	1941	1943	1945	1947	1949	1951	1953	1955	1957	1959	1961	1963	1965	1967	1969	1971	1973	1975	1977	1979	1981	1983	1985	1987	1989	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019	2021	2023	2025	2027	2029	2031	2033	2035	2037	2039	2041	2043	2045	2047	2049	2051	2053	2055	2057	2059	2061	2063	2065	2067	2069	2071	2073	2075	2077	2079	2081	2083	2085	2087	2089	2091	2093	2095	2097	2099	2101	2103	2105	2107	2109	2111	2113	2115	2117	2119	2121	2123	2125	2127	2129	2131	2133	2135	2137	2139	2141	2143	2145	2147	2149	2151	2153	2155	2157	2159	2161	2163	2165	2167	2169	2171	2173	2175	2177	2179	2181	2183	2185	2187	2189	2191	2193	2195	2197	2199	2201	2203	2205	2207	2209	2211	2213	2215	2217	2219	2221	2223	2225	2227	2229	2231	2233	2235	2237	2239	2241	2243	2245	2247	2249	2251	2253	2255	2257	2259	2261	2263	2265	2267	2269	2271	2273	2275	2277	2279	2281	2283	2285	2287	2289	2291	2293	2295	2297	2299	2301	230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71 ROUTE 200 SOUTH SOMERVILLE, NEW JERSEY 08876
 TELEPHONE 201-722-8295

REF. NO. 258405.

BUCKMAN SEWAGE TREATMENT PLANT, JACKSONVILLE, FLA.

SHT. 10

OPERATIONS LOG.

INCINERATOR No. 2

TIME HR.	CENTRIFUGE NO.	TOTAL FEED WGT-150	AUG. TONE	TEMPERATURE												%	FURN.	PIC.	SIC.	V	S	D	I	D	FAN	AMM	SHT.	
				T ₁ 101 (PT-1)	T ₂ 102 (PT-2)	T ₃ 103 (PT-3)	T ₄ 104 (PT-4)	T ₅ 105 (PT-5)	T ₆ 106 (PT-6)	T ₇ 107 (PT-7)	T ₈ 108 (PT-8)	T ₉ 109 (PT-9)	T ₁₀ 110 (PT-10)	T ₁₁ 111 (PT-11)	T ₁₂ 112 (PT-12)													
1330	2	698342		154	1526	147	138	135	435	38	195	287	108	124	124	6.0	.07	1.10	19.5	9.4	4.0	106	110	110	110	110	110	110
1345		701277	1.7	906	1535	1551	1607	1249	432	233	146	287	108	124	124	6.3	.07	1.10	19.5	9.4	4.0	106	110	110	110	110	110	110
1400		708006	6.9	900	1579	147	1651	1206	414	230	144	287	1052	121	121	8.2	.12	1.05	19.9	9.4	3.8	105	110	110	110	110	110	110
1415		705018	9.0	806	1583	147	1672	1196	398	229	141	240	1061	120	120	7.0	.05	1.05	17.5	9.2	3.3	102	110	110	110	110	110	110
1430		706810	7.2	878	1577	1566	1631	1170	379	247	150	292	1063	119	121	7.1	.09	1.04	17.9	9.2	3.6	102	110	110	110	110	110	110
1445		708605	7.2	878	1577	1566	1631	1155	372	249	144	295	1080	122	121	6.8	.05	1.06	18.7	9.1	3.5	102	110	110	110	110	110	110
1500		710317	7.0	880	1537	1569	1694	1192	375	248	142	297	1082	121	122	6.1	.08	1.06	18.0	9.2	3.4	102	110	110	110	110	110	110
1515		712139	7.2	885	1600	1601	1692	1195	372	246	144	297	1085	121	121	6.2	.13	1.04	18.0	9.2	3.4	102	110	110	110	110	110	110
1530		714012	7.5	896	1619	1641	1683	1176	373	247	144	297	1085	121	121	6.2	.13	1.04	18.0	9.2	3.4	102	110	110	110	110	110	110
1545		715724	6.9	906	1607	1608	1683	1176	393	247	144	297	1085	121	121	6.2	.11	1.04	18.5	9.2	3.3	100	110	110	110	110	110	110
1600		717561	7.3	906	1645	1624	1687	1175	394	247	144	297	1085	121	121	6.3	.10	1.04	18.8	9.1	3.3	99	110	110	110	110	110	110
1615		719375	7.3	910	1671	1692	1690	1178	393	249	144	297	1085	121	121	6.0	.08	1.04	18.8	9.1	3.3	99	110	110	110	110	110	110
1630		721120	7.8	926	1579	1719	1685	1170	393	249	144	297	1085	121	121	6.0	.08	1.04	18.8	9.1	3.3	99	110	110	110	110	110	110
1645		722947	7.1	920	1624	1702	1680	1156	391	249	144	297	1085	121	121	6.0	.11	1.06	19.2	9.2	3.3	100	110	110	110	110	110	110
1700		724644	7.0	935	1630	1762	1676	1151	370	249	144	297	1085	121	121	5.9	.09	1.05	19.2	9.2	3.3	100	110	110	110	110	110	110
1715		726434	6.9	931	1680	1727	1659	1147	368	249	144	297	1085	121	121	5.9	.10	1.04	19.2	9.1	3.3	100	110	110	110	110	110	110
1730		728207	7.1	901	1572	1689	1665	1146	387	249	144	297	1085	121	121	6.9	.10	1.04	19.2	9.1	3.3	100	110	110	110	110	110	110
1745		729841	6.5	907	1658	1698	1680	1172	387	249	144	297	1085	121	121	6.9	.13	1.04	18.0	9.1	3.2	100	110	110	110	110	110	110
1800		731752	7.6	922	1659	1684	1684	1167	340	250	171	303	1105	123	121	6.4	.10	1.04	19.5	9.1	3.4	102	110	110	110	110	110	110
1815		734046		926	1654	1746	1661	1146	342	251	173	305	1100	120	121	6.5	.14	1.04	19.2	9.2	3.5	103	110	110	110	110	110	110
1830		742145	6.9	933	1661	1738	1656	1146	385	251	170	306	1099	120	121	6.5	.10	1.05	19.7	9.2	3.5	103	110	110	110	110	110	110
1845		743844	6.8	935	1659	1738	1657	1127	384	250	170	306	1099	120	121	6.5	.09	1.05	19.9	9.2	3.5	103	110	110	110	110	110	110
1900		745619	7.1	938	1695	1735	1646	1105	382	250	170	306	1096	120	120	6.6	.08	1.06	19.0	9.2	3.5	102	110	110	110	110	110	110

REF NO. 258405. OPERATIONS LOG. DATE: 4/30/87 INCINERATOR NO. 2

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NOTE: note aus. 80-84% adds and 60% volatiles

71 ROUTE 200 SOUTH SOMERVILLE, NEW JERSEY 08876
 TELEPHONE 201-722-0800
 BUCKMAN SEWAGE TREATMENT PLANT, JACKSONVILLE, FLA. SMT. 1002
 REF. NO. 258405. DATE: 5/1/87 INCINERATOR No. 2

IN- MR.	CENTRIFUGE NO.	TOTAL FEED WGL-150	AVG. Tons / hr	TEMPERATURE										FLUE GAS ANALYSIS	FURNACE TEMPERATURE	VEIN TEMPERATURE	SCRUBBER TEMPERATURE	DEM- 5 T E R II.	I.D. FAN AMPS	INCREATOR No. 2					
				7M 101 (PT-0)	7M 102 (PT-2)	7M 103 (PT-3)	7M 104 (PT-4)	7M 105 (PT-5)	7M 106 (PT-6)	7M 107 (PT-7)	7M 108 (PT-8)	7M 109 (PT-9)	7M 110 (PT-10)												
1515	8	800930	8.2	716	1937	1506	1717	1157	72	340	172	276	276	1070	125	126	5.0	07	1.04	81.3	7.4	3.8	105	32	3
1530		787817	8.0	715	1935	1495	1722	1122	73	233	160	277	277	1068	123	124	5.2	08	1.04	81.6	7.4	3.9	104	32	
1545		784622	7.4	873	1515	1505	1727	1125	365	222	150	277	277	1068	123	123	5.1	08	1.04	81.8	7.4	3.9	104	39	
1600		821111	8.3	722	1522	1575	1728	1126	363	217	148	276	276	1081	122	123	7.0	10	1.04	81.3	7.4	4.2	108	48	
1615		823441	7.2	721	1521	1635	1734	1125	365	226	151	277	277	1089	122	123	6.9	09	1.04	81.8	7.4	4.0	108	19	
1630		820929	7.5	723	1523	1621	1728	1134	365	228	162	279	279	1122	122	123	6.5	10	1.04	81.2	7.4	4.0	107	18	
1645		821111	7.4	722	1522	1677	1723	1129	367	231	151	277	277	1120	122	123	6.1	10	1.04	81.2	7.4	3.9	106	19	
1700		821427	7.6	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
1715		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
1730		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
1745		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
1760		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
1775		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
1790		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
1805		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
1815		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
1830		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
1845		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
1900		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
1915		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
1930		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
1945		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2000		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2015		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2030		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2045		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2060		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2075		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2090		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2105		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2120		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2135		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2150		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2165		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2180		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2195		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2210		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2225		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2240		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2255		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2270		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2285		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2300		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2315		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2330		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2345		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04	81.2	7.4	4.0	107	19	
2360		821111	7.2	721	1521	1709	1678	1110	364	222	152	277	277	1118	122	123	6.6	12	1.04						

TIME	MR.	CENTRIFUGE	TOTAL PUMP WAL-150	AUG. TONE / HR	TEMPERATURE - °F												%	FUM	SH	VE	SC	DE	ID	FAN	IN
					T ₁	T ₂	T ₃	T ₄	T ₅	T ₆	T ₇	T ₈	T ₉	T ₁₀	T ₁₁	T ₁₂									
0920	1	0839157		3.1	1513	1572	1602	1604	3.55	217	151	272	1010	118	119	7.4	0.13	1.06	15.5	4.3	3.8	10.2	18	19	3
0945	1	0840876	6.9	8.26	1571	1607	1642	1642	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1000	1	0842590	6.9	8.78	1571	1612	1642	1642	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1015	1	0843304	6.8	8.77	1548	1605	1635	1635	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1030	1	0846039	6.9	8.76	1552	1605	1635	1635	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1045	1	0847799	7.0	8.80	1582	1609	1635	1635	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1100	1	0849560	7.0	9.83	1627	1641	1641	1641	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1115	1	0851264	6.8	7.71	1553	1637	1637	1637	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1130	1	0853057	7.2	8.87	1552	1631	1641	1641	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1145	1	0854727	6.7	8.82	1578	1608	1641	1641	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1200	1	0856579	7.4	8.83	1571	1620	1637	1641	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1215	1	0858013	5.7	8.87	1572	1619	1637	1637	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1230	1	0859779	7.1	9.10	1645	1644	1635	1645	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1245	1	0861487	6.8	9.15	1648	1627	1572	1572	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1300	1	0863297	7.6	8.61	1681	1533	1571	1146	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1315	1	0864791	6.8	8.97	1578	1597	1620	1103	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1330	1	0866005	7.3	8.85	1586	1579	1635	1077	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1345	1	0867084	7.1	9.24	1680	1670	1637	1055	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1400	1	0868205	7.3	9.32	1638	1713	1641	1050	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1415	1	0869509	9.2	9.08	1648	1200	1649	1084	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1430	1	0870538	8.1	9.45	1679	1732	1657	1084	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3
1445	1	0871771	8.9	9.87	1691	1584	1727	1120	3.7	222	156	268	1022	120	120	7.2	0.12	1.08	15.5	4.3	3.7	10.2	18	19	3

Standard centrifuge & increased feed to 200 gpm @ 14:45.

71 ROUTE 200 SOUTH BOWENVILLE, NEW JERSEY 08029
 TELEPHONE 201-722-6905

BUCKMAN SEWAGE TREATMENT PLANT, JACKSONVILLE, FLA.
 REF. NO. 258405

INCUBATOR NO. 2

DATE: 5/6/77

OPERATIONS LOG

TIME HR.		CENTRIFUGE NO.	TOTAL PUMPS WGL-190	AUG. Tons/Hour	TEMPERATURE												FURN DRY F		FURN WET F		VENT DRY F		VENT WET F		SCRU DRY F		SCRU WET F		DEM DRY F		DEM WET F		I.D. FAN RPM		I.D. FAN TEMP		I.D. FAN PRESS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
					T1 101 (PT-1)	T2 102 (PT-2)	T3 103 (PT-3)	T4 104 (PT-4)	T5 105 (PT-5)	T6 106 (PT-6)	T7 107 (PT-7)	T8 108 (PT-8)	T9 109 (PT-9)	T10 110 (PT-10)	T11 111 (PT-11)	T12 112 (PT-12)	T13 113 (PT-13)	T14 114 (PT-14)	T15 115 (PT-15)	T16 116 (PT-16)	T17 117 (PT-17)	T18 118 (PT-18)	T19 119 (PT-19)	T20 120 (PT-20)	T21 121 (PT-21)	T22 122 (PT-22)	T23 123 (PT-23)	T24 124 (PT-24)	T25 125 (PT-25)	T26 126 (PT-26)	T27 127 (PT-27)	T28 128 (PT-28)	T29 129 (PT-29)	T30 130 (PT-30)	T31 131 (PT-31)	T32 132 (PT-32)	T33 133 (PT-33)	T34 134 (PT-34)	T35 135 (PT-35)	T36 136 (PT-36)	T37 137 (PT-37)	T38 138 (PT-38)	T39 139 (PT-39)	T40 140 (PT-40)	T41 141 (PT-41)	T42 142 (PT-42)	T43 143 (PT-43)	T44 144 (PT-44)	T45 145 (PT-45)	T46 146 (PT-46)	T47 147 (PT-47)	T48 148 (PT-48)	T49 149 (PT-49)	T50 150 (PT-50)	T51 151 (PT-51)	T52 152 (PT-52)	T53 153 (PT-53)	T54 154 (PT-54)	T55 155 (PT-55)	T56 156 (PT-56)	T57 157 (PT-57)	T58 158 (PT-58)	T59 159 (PT-59)	T60 160 (PT-60)	T61 161 (PT-61)	T62 162 (PT-62)	T63 163 (PT-63)	T64 164 (PT-64)	T65 165 (PT-65)	T66 166 (PT-66)	T67 167 (PT-67)	T68 168 (PT-68)	T69 169 (PT-69)	T70 170 (PT-70)	T71 171 (PT-71)	T72 172 (PT-72)	T73 173 (PT-73)	T74 174 (PT-74)	T75 175 (PT-75)	T76 176 (PT-76)	T77 177 (PT-77)	T78 178 (PT-78)	T79 179 (PT-79)	T80 180 (PT-80)	T81 181 (PT-81)	T82 182 (PT-82)	T83 183 (PT-83)	T84 184 (PT-84)	T85 185 (PT-85)	T86 186 (PT-86)	T87 187 (PT-87)	T88 188 (PT-88)	T89 189 (PT-89)	T90 190 (PT-90)	T91 191 (PT-91)	T92 192 (PT-92)	T93 193 (PT-93)	T94 194 (PT-94)	T95 195 (PT-95)	T96 196 (PT-96)	T97 197 (PT-97)	T98 198 (PT-98)	T99 199 (PT-99)	T100 200 (PT-100)	T101 201 (PT-101)	T102 202 (PT-102)	T103 203 (PT-103)	T104 204 (PT-104)	T105 205 (PT-105)	T106 206 (PT-106)	T107 207 (PT-107)	T108 208 (PT-108)	T109 209 (PT-109)	T110 210 (PT-110)	T111 211 (PT-111)	T112 212 (PT-112)	T113 213 (PT-113)	T114 214 (PT-114)	T115 215 (PT-115)	T116 216 (PT-116)	T117 217 (PT-117)	T118 218 (PT-118)	T119 219 (PT-119)	T120 220 (PT-120)	T121 221 (PT-121)	T122 222 (PT-122)	T123 223 (PT-123)	T124 224 (PT-124)	T125 225 (PT-125)	T126 226 (PT-126)	T127 227 (PT-127)	T128 228 (PT-128)	T129 229 (PT-129)	T130 230 (PT-130)	T131 231 (PT-131)	T132 232 (PT-132)	T133 233 (PT-133)	T134 234 (PT-134)	T135 235 (PT-135)	T136 236 (PT-136)	T137 237 (PT-137)	T138 238 (PT-138)	T139 239 (PT-139)	T140 240 (PT-140)	T141 241 (PT-141)	T142 242 (PT-142)	T143 243 (PT-143)	T144 244 (PT-144)	T145 245 (PT-145)	T146 246 (PT-146)	T147 247 (PT-147)	T148 248 (PT-148)	T149 249 (PT-149)	T150 250 (PT-150)	T151 251 (PT-151)	T152 252 (PT-152)	T153 253 (PT-153)	T154 254 (PT-154)	T155 255 (PT-155)	T156 256 (PT-156)	T157 257 (PT-157)	T158 258 (PT-158)	T159 259 (PT-159)	T160 260 (PT-160)	T161 261 (PT-161)	T162 262 (PT-162)	T163 263 (PT-163)	T164 264 (PT-164)	T165 265 (PT-165)	T166 266 (PT-166)	T167 267 (PT-167)	T168 268 (PT-168)	T169 269 (PT-169)	T170 270 (PT-170)	T171 271 (PT-171)	T172 272 (PT-172)	T173 273 (PT-173)	T174 274 (PT-174)	T175 275 (PT-175)	T176 276 (PT-176)	T177 277 (PT-177)	T178 278 (PT-178)	T179 279 (PT-179)	T180 280 (PT-180)	T181 281 (PT-181)	T182 282 (PT-182)	T183 283 (PT-183)	T184 284 (PT-184)	T185 285 (PT-185)	T186 286 (PT-186)	T187 287 (PT-187)	T188 288 (PT-188)	T189 289 (PT-189)	T190 290 (PT-190)	T191 291 (PT-191)	T192 292 (PT-192)	T193 293 (PT-193)	T194 294 (PT-194)	T195 295 (PT-195)	T196 296 (PT-196)	T197 297 (PT-197)	T198 298 (PT-198)	T199 299 (PT-199)	T200 300 (PT-200)	T201 301 (PT-201)	T202 302 (PT-202)	T203 303 (PT-203)	T204 304 (PT-204)	T205 305 (PT-205)	T206 306 (PT-206)	T207 307 (PT-207)	T208 308 (PT-208)	T209 309 (PT-209)	T210 310 (PT-210)	T211 311 (PT-211)	T212 312 (PT-212)	T213 313 (PT-213)	T214 314 (PT-214)	T215 315 (PT-215)	T216 316 (PT-216)	T217 317 (PT-217)	T218 318 (PT-218)	T219 319 (PT-219)	T220 320 (PT-220)	T221 321 (PT-221)	T222 322 (PT-222)	T223 323 (PT-223)	T224 324 (PT-224)	T225 325 (PT-225)	T226 326 (PT-226)	T227 327 (PT-227)	T228 328 (PT-228)	T229 329 (PT-229)	T230 330 (PT-230)	T231 331 (PT-231)	T232 332 (PT-232)	T233 333 (PT-233)	T234 334 (PT-234)	T235 335 (PT-235)	T236 336 (PT-236)	T237 337 (PT-237)	T238 338 (PT-238)	T239 339 (PT-239)	T240 340 (PT-240)	T241 341 (PT-241)	T242 342 (PT-242)	T243 343 (PT-243)	T244 344 (PT-244)	T245 345 (PT-245)	T246 346 (PT-246)	T247 347 (PT-247)	T248 348 (PT-248)	T249 349 (PT-249)	T250 350 (PT-250)	T251 351 (PT-251)	T252 352 (PT-252)	T253 353 (PT-253)	T254 354 (PT-254)	T255 355 (PT-255)	T256 356 (PT-256)	T257 357 (PT-257)	T258 358 (PT-258)	T259 359 (PT-259)	T260 360 (PT-260)	T261 361 (PT-261)	T262 362 (PT-262)	T263 363 (PT-263)	T264 364 (PT-264)	T265 365 (PT-265)	T266 366 (PT-266)	T267 367 (PT-267)	T268 368 (PT-268)	T269 369 (PT-269)	T270 370 (PT-270)	T271 371 (PT-271)	T272 372 (PT-272)	T273 373 (PT-273)	T274 374 (PT-274)	T275 375 (PT-275)	T276 376 (PT-276)	T277 377 (PT-277)	T278 378 (PT-278)	T279 379 (PT-279)	T280 380 (PT-280)	T281 381 (PT-281)	T282 382 (PT-282)	T283 383 (PT-283)	T284 384 (PT-284)	T285 385 (PT-285)	T286 386 (PT-286)	T287 387 (PT-287)	T288 388 (PT-288)	T289 389 (PT-289)	T290 390 (PT-290)	T291 391 (PT-291)	T292 392 (PT-292)	T293 393 (PT-293)	T294 394 (PT-294)	T295 395 (PT-295)	T296 396 (PT-296)	T297 397 (PT-297)	T298 398 (PT-298)	T299 399 (PT-299)	T300 400 (PT-300)	T301 401 (PT-301)	T302 402 (PT-302)	T303 403 (PT-303)	T304 404 (PT-304)	T305 405 (PT-305)	T306 406 (PT-306)	T307 407 (PT-307)	T308 408 (PT-308)	T309 409 (PT-309)	T310 410 (PT-310)	T311 411 (PT-311)	T312 412 (PT-312)	T313 413 (PT-313)	T314 414 (PT-314)	T315 415 (PT-315)	T316 416 (PT-316)	T317 417 (PT-317)	T318 418 (PT-318)	T319 419 (PT-319)	T320 420 (PT-320)	T321 421 (PT-321)	T322 422 (PT-322)	T323 423 (PT-323)	T324 424 (PT-324)	T325 425 (PT-325)	T326 426 (PT-326)	T327 427 (PT-327)	T328 428 (PT-328)	T329 429 (PT-329)	T330 430 (PT-330)	T331 431 (PT-331)	T332 432 (PT-332)	T333 433 (PT-333)	T334 434 (PT-334)	T335 435 (PT-335)	T336 436 (PT-336)	T337 437 (PT-337)	T338 438 (PT-338)	T339 439 (PT-339)	T340 440 (PT-340)	T341 441 (PT-341)	T342 442 (PT-342)	T343 443 (PT-343)	T344 444 (PT-344)	T345 445 (PT-345)	T346 446 (PT-346)	T347 447 (PT-347)	T348 448 (PT-348)	T349 449 (PT-349)	T350 450 (PT-350)	T351 451 (PT-351)	T352 452 (PT-352)	T353 453 (PT-353)	T354 454 (PT-354)	T355 455 (PT-355)	T356 456 (PT-356)	T357 457 (PT-357)	T358 458 (PT-358)	T359 459 (PT-359)	T360 460 (PT-360)	T361 461 (PT-361)	T362 462 (PT-362)	T363 463 (PT-363)	T364 464 (PT-364)	T365 465 (PT-365)	T366 466 (PT-366)	T367 467 (PT-367)	T368 468 (PT-368)	T369 469 (PT-369)	T370 470 (PT-370)	T371 471 (PT-371)	T372 472 (PT-372)	T373 473 (PT-373)	T374 474 (PT-374)	T375 475 (PT-375)	T376 476 (PT-376)	T377 477 (PT-377)	T378 478 (PT-378)	T379 479 (PT-379)	T380 480 (PT-380)	T381 481 (PT-381)	T382 482 (PT-382)	T383 483 (PT-383)	T384 484 (PT-384)	T385 485 (PT-385)	T386 486 (PT-386)	T387 487 (PT-387)	T388 488 (PT-388)	T389 489 (PT-389)	T390 490 (PT-390)	T391 491 (PT-391)	T392 492 (PT-392)	T393 493 (PT-393)	T394 494 (PT-394)	T395 495 (PT-395)	T396 496 (PT-396)	T397 497 (PT-397)	T398 498 (PT-398)	T399 499 (PT-399)	T400 500 (PT-400)	T401 501 (PT-401)	T402 502 (PT-402)	T403 503 (PT-403)	T404 504 (PT-404)	T405 505 (PT-405)	T406 506 (PT-406)	T407 507 (PT-407)	T408 508 (PT-408)	T409 509 (PT-409)	T410 510 (PT-410)	T411 511 (PT-411)	T412 512 (PT-412)	T413 513 (PT-413)	T414 514 (PT-414)	T415 515 (PT-415)	T416 516 (PT-416)	T417 517 (PT-417)	T418 518 (PT-418)	T419 519 (PT-419)	T420 520 (PT-420)	T421 521 (PT-421)	T422 522 (PT-422)	T423 523 (PT-423)	T424 524 (PT-424)	T425 525 (PT-425)	T426 526 (PT-426)	T427 527 (PT-427)	T428 528 (PT-428)	T429 529 (PT-429)	T430 530 (PT-430)	T431 531 (PT-431)	T432 532 (PT-432)	T433 533 (PT-433)	T434 534 (PT-434)	T435 535 (PT-435)	T436 536 (PT-436)	T437 537 (PT-437)	T438 538 (PT-438)	T439 539 (PT-439)	T440 540 (PT-440)	T441 541 (PT-441)	T442 542 (PT-442)	T443 543 (PT-443)	T444 544 (PT-444)	T445 545 (PT-445)	T446 546 (PT-446)	T447 547 (PT-447)	T448 548 (PT-448)	T449 549 (PT-449)	T450 550 (PT-450)	T451 551 (PT-451)	T452 552 (PT-452)	T453 553 (PT-453)	T454 554 (PT-454)	T455 555 (PT-455)	T456 556 (PT-456)	T457 557 (PT-457)	T458 558 (PT-458)	T459 559 (PT-459)	T460 560 (PT-460)	T461 561 (PT-461)	T462 562 (PT-462)	T463 563 (PT-463)	T464 564 (PT-464)	T465 565 (PT-465)	T466 566 (PT-466)	T467 567 (PT-467)	T468 568 (PT-468)	T469 569 (PT-469)	T470 570 (PT-470)	T471 571 (PT-471)	T472 572 (PT-472)	T473 573 (PT-473)	T474 574 (PT-474)	T475 575 (PT-475)	T476 576 (PT-476)	T477 577 (PT-477)	T478 578 (PT-478)	T479 579 (PT-479)	T480 580 (PT-480)	T481 581 (PT-481)	T482 582 (PT-482)	T483 583 (PT-483)	T484 584 (PT-484)	T485 585 (PT-485)	T486 586 (PT-486)	T487 587 (PT-487)	T488 588 (PT-488)	T489 589 (PT-489)	T490 590 (PT-490)	T491 591 (PT-491)	T492 592 (PT-492)	T493 593 (PT-493)	T494 594 (PT-494)	T495 595 (PT-495)	T496 596 (PT-496)	T497 597 (PT-497)	T498 598 (PT-498)	T499 599 (PT-499)	T500 600 (PT-500)	T501 601 (PT-501)	T502 602 (PT-502)	T503 603 (PT-503)	T504 604 (PT-504)	T505 605 (PT-505)	T506 606 (PT-506)	T507 607 (PT-507)	T508 608 (PT-508)	T509 609 (PT-509)	T510 610 (PT-510)	T511 611 (PT-511)	T512 612 (PT-512)	T513 613 (PT-513)	T514 614 (PT-514)	T515 615 (PT-515)	T516 616 (PT-516)	T517 617 (PT-517)	T518 618 (PT-518)	T519 619 (PT-519)	T520 620 (PT-520)	T521 621 (PT-521)	T522 622 (PT-522)	T523 623 (PT-523)	T524 624 (PT-524)	T525 625 (PT-525)	T526 626 (PT-526)	T527 627 (PT-527)	T528 628 (PT-528)	T529 629 (PT-529)	T530 630 (PT-530)	T531 631 (PT-531)	T532 632 (PT-532)	T533 633 (PT-533)	T534 634 (PT-534)	T535 635 (PT-535)	T536 636 (PT-536)	T537 637 (PT-537)	T538 638 (PT-538)	T539 639 (PT-539)	T540 640 (PT-540)	T541 641 (PT-541)	T542 642 (PT-542)	T543 643 (PT-543)	T544 644 (PT-544)	T545 645 (PT-545)	T546 646 (PT-546)	T547 647 (PT-547)	T548 648 (PT-548)	T549 649 (PT-549)	T550 650 (PT-550)	T551 651 (PT-551)	T552 652 (PT-552)	T553 653 (PT-553)	T554 654 (PT-554)	T555 655 (PT-555)	T556 656 (PT-556)	T557 657 (PT-557)	T558 658 (PT-558)	T559 659 (PT-559)	T560 660 (PT-560)	T561 661 (PT-561)	T562 662 (PT-562)	T563 663 (PT-563)	T564 664 (PT-564)	T565 665 (PT-565)	T566 666 (PT-566)	T567 667 (PT-567)	T568 668 (PT-568)	T569 669 (PT-569)	T570 670 (PT-570)	T571 671 (PT-571)	T572 672 (PT-572)	T573 673 (PT-573)	T574 674 (PT-574)	T575 675 (PT-575)	T576 676 (PT-576)	T577 677 (PT-577)	T578 678 (PT-578)	T579 679 (PT-579)	T580 680 (PT-580)	T581 681 (PT-581)	T582 682 (PT-582)	T583 683 (PT-583)	T584 684 (PT-584)	T585 685 (PT-585)	T586 686 (PT-586)	T587 687

OPERATIONS LOG

DATE: 5/1/82

INCINERATION

INCINERATOR No. 2										OPERATIONS LOG										DATE: 5/3/87									
CENTRIFUGE NO.										TEMPERATURE - °F										% O ₂ / % H ₂ O									
TOTAL FEEDS										FURNACE										FURNACE									
WGT. 150										FURNACE										FURNACE									
AUG. TONS / HR										FURNACE										FURNACE									
T ₁₀₁ T ₁₀₂ T ₁₀₃ T ₁₀₄ T ₁₀₅ T ₁₀₆ T ₁₀₇ T ₁₀₈ T ₁₀₉ T ₁₁₀										FURNACE										FURNACE									
T ₁₀₁ T ₁₀₂ T ₁₀₃ T ₁₀₄ T ₁₀₅ T ₁₀₆ T ₁₀₇ T ₁₀₈ T ₁₀₉ T ₁₁₀										FURNACE										FURNACE									
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347.18

-I-AS
 -I-ZP-TZIW

BUCKMAN SEWAGE TREATMENT PLANT, JACKSONVILLE, FLA.
OPERATIONS LOG. DATE: 5/4/87 INCINER
REF. NO. 258405.

Slr. 18

OPERATIONS LOG.

DATE 5/4/87

INCINERATOR No. 2

[illegible]

clamps opened to vent shaft air reduced to 50% diff

SHY-182

INCUBATOR No. 2

CENTRIFUGE NO.										TOTAL FEED WGT-LBS										AUG. TONS/HR										TEMPERATURE - °F										FURN										I.D. FAN AMPS or I.T.										I.D. 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APPENDIX B

SAMPLE CALCULATIONS:

B.1 ISOKINETICS

B.2 EMISSION FACTORS

B.1 ISOKINETICS

RADIAN SOURCE TEST EPA METHODS 2-5 DEFINITION OF TERMS

PARAMETER -----	DEFINITION -----
Tt(min.)	TOTAL SAMPLING TIME
Dn(in.)	SAMPLING NOZZLE DIAMETER
Ps(in.H2O)	ABSOLUTE STACK STATIC GAS PRESSURE
Vm(cu.ft.)	ABSOLUTE VOLUME OF GAS SAMPLE MEASURED BY DGM
Vw(gm.)	TOTAL STACK MOISTURE COLLECTED
Pm(in.H2O)	AVERAGE STATIC PRESSURE OF DGM
Tm(F)	AVERAGE TEMPERATURE OF DGM
Pb(in.Hg.)	BAROMETRIC PRESSURE
% CO2	CARBON DIOXIDE CONTENT OF STACK GAS
% O2	OXYGEN CONTENT OF STACK GAS
% N2	NITROGEN CONTENT OF STACK GAS
SQR(DELPs)	AVE. SQ. ROOT OF S-PITOT DIFF. PRESSURE-TEMP. PRODUCT
As(sq.in.)	CROSS-SECTIONAL AREA OF STACK(DUCT)
Ts(F)	TEMPERATURE OF STACK
Vm(dscf)	STANDARD VOLUME OF GAS SAMPLED, Vm(std), AS DRY STD
Vm(dscm)	STANDARD VOLUME OF GAS SAMPLED, Vm(std), AS DRY STD.
Vw gas(scf)	VOLUME OF WATER VAPOR IN GAS SAMPLE, STD
% moisture	WATER VAPOR COMPOSITION OF STACK GAS
Md	PROPORTION, BY VOLUME, OF DRY GAS IN GAS SAMPLE
MWd	MOLECULAR WEIGHT OF STACK GAS, DRY BASIS LB/LB-MOLE
MW	MOLECULAR WEIGHT OF STACK GAS, WET BASIC LB/LB-MOLE
Vs(fpm)	AVERAGE STACK GAS VELOCITY
Flow(acfm) 10a	AVERAGE STACK GAS FLOW RATE(ACTUAL STACK COND.)
Flow(acmm)	AVERAGE STACK GAS FLOW RATE(ACTUAL STACK COND.)
Flow(dscfm)	AVERAGE STACK GAS VOLUMETRIC FLOW RATE(DRY BASIS)
Flow(dscmm)	AVERAGE STACK GAS VOLUMETRIC FLOW RATE(DRY BASIS)
% I	PERCENT ISOKINETIC
% EA	PERCENT EXCESS AIR IN STACK GAS
DGM	DRY GAS METER
Y	DRY GAS METER CORRECTION FACTOR
Pg	STACK STATIC GAS PRESSURE
Cp	PITOT COEFFICIENT
dH	ORIFICE PLATE DIFF. PRESS. VALUE
dP	PITOT DIFF. PRESS. VALUE

 STANDARD TEMPERATURE = 68 deg-F (528 deg-R)
 STANDARD PRESSURE = 29.92 in. Hg.

RADIAN SOURCE TEST EPA METHOD 2-5 SAMPLE CALCULATION

PLANT :
PLANT SITE :
SAMPLING LOCATION : OUTLET
TEST # : 0503-O-M12S-02
DATE : 5387
TEST PERIOD : 1202-1447

- 1) Volume of dry gas sampled at standard conditions (68 deg-F , 29.92 in. Hg)

$$V_m(\text{std}) = \frac{Y \times V_m \times [T(\text{std}) + 460] \times [P_b + (P_m/13.6)]}{P(\text{std}) \times (T_m + 460)}$$

$$V_m(\text{std}) = \frac{1.0051 \times 70.456 \times 528 \times [29.8 + (1.1275 / 13.6)]}{29.92 \times (91.33334 + 460)}$$

$$V_m(\text{std}) = 67.734 \text{ dscf}$$

- 2) Volume of water vapor at standard conditions:

$$V_w(\text{gas}) = 0.04715 \text{ cf/gm} \times W(1) \text{ gm}$$

$$V_w(\text{gas}) = 0.04715 \times 146.6 = 6.912 \text{ scf}$$

- 3) Percent Moisture in stack gas :

$$\%M = \frac{100 \times V_w(\text{gas})}{V_m(\text{std}) + V_w(\text{gas})}$$

$$\%M = \frac{100 \times 6.912}{67.734 + 6.912} = 9.26 \%$$

- 4) Mole fraction of dry stack gas :

$$M_d = \frac{100 - \%M}{100} = \frac{100 - 9.26}{100} = .9074009$$

SAMPLE CALCULATION PAGE TWO

5) Average Molecular Weight of DRY stack gas :

$$MWd = (.44 \times \%CO_2) + (.32 \times \%O_2) + (.28 \times \%N_2)$$

$$MWd = (.44 \times 4) + (.32 \times 15.9) + (.28 \times 80.1) = 29.276$$

6) Average Molecular Weight of wet stack gas :

$$MW = MWd \times Md + 18(1 - Md)$$

$$MW = 29.276 \times .9074009 + 18(1 - .9074009) = 28.23185$$

7) Stack gas velocity in feet-per-minute (fpm) at stack conditions :

$$Vs = Kp \times Cp \times [SQRT(dP)]\{ave\} \times SQRT[Ts\{avg\}] \times SQRT[1/(Ps \times MW)] \times 60 \text{sec}/mi$$

$$Vs = 85.49 \times .84 \times 60 \times 12.67923 \times SQRT[1/(29.82941 \times 28.23185)]$$

$$Vs = 1882.551 \text{ FPM}$$

8) Average stack gas dry volumetric flow rate (DSCFM) :

$$Qsd = \frac{Vs \times As \times Md \times T(std) \times Ps}{144 \text{ cu. in.}/\text{cu. ft.} \times (Ts + 460) \times P(std)}$$

$$Qsd = \frac{1882.551 \times 1417.878 \times .9074009 \times 528 \times 29.82941}{144 \times 560.125 \times 29.92}$$

$$Qsd = 11347.79 \text{ dscfm}$$

$$Qsd = 11347.79 \text{ dscfm}$$

SAMPLE CALCULATION PAGE THREE

9) Isokinetic sampling rate (%) :

Dimensional Constant C = $K_4 \times 60 \times 144 \times [1 / (P_1 / 4)]$
 $K_4 = .0945$ FOR ENGLISH UNITS

$$IX = \frac{C \times V_m(\text{std}) \times (T_s + 460)}{V_s \times T_t \times P_s \times M_d \times (D_n)^2}$$

$$IX = \frac{1039.574 \times 67.73422 \times 560.125}{1882.551 \times 120 \times 29.82941 \times .9074009 \times (.247)^2}$$

$$IX = 105.7263$$

10) Excess air (%) :

$$EA = \frac{100 \times \%O_2}{(.264 \times \%N_2) - \%O_2} = \frac{100 \times 15.9}{(.264 \times 80.1) - 15.9}$$

$$EA = 303.06$$

11) Particulate Concentration :

$$C_s = (\text{grams part.}) / V_m(\text{std}) = .0512 / 67.73422$$

$$C_s = 0.0007559 \text{ Grams/DSCF}$$

$$C_a = \frac{T(\text{std}) \times M_d \times P_s \times C_s}{P(\text{std}) \times T_s}$$

$$C_a = \frac{528 \times .9074009 \times 29.82941 \times 0.0007559}{29.92 \times 560.125 \times 0 ; CV(14)+460}$$

$$C_a = 0.0006446 \text{ Grams/ACF}$$

$$\text{LBS/HR} = C_s \times 0.002205 \times Q_{sd} \times 60$$

$$\text{LBS/HR} = 0.0007559 \times 0.002205 \times 11347.8 \times 60$$

$$\text{LBS/HR} = 1.134835$$

B.2 SAMPLE CALCULATIONS

The following calculations apply to EPA Method 12, semi-volatile, and volatile testing procedures which were conducted at Site 3 of the Sewage Sludge Incineration Study. One sample calculation from each type of test is illustrated. A list of definitions is included for the emission factor calculations.

DEFINITION OF TERMS

<u>Parameter</u>	<u>Definition</u>
C (ug/dscm)	Concentration of Target Compound in the Stack Gas
C (CO ₂) (ug/dscm)	Concentration of Target Compound in the Stack Gas Adjusted to 12% CO ₂
CF	CO ₂ Correction Factor (12%/CO ₂)
% CO ₂	Average Concentration of CO ₂ in the Stack Gas
EF	Emission Factor; Relates Stack Emissions to Feed Rate
ER (mg/hr)	Emission Rate of Target Compound
EV	Emission of Target Compound per Metric Ton of Volatile Solids Fed
Flow (dscmm)	Average Stack Volumetric Flow Rate (Dry Basis)
FS (metric ton/hr)	Average Dry Sludge Feed Rate
M (ug)	Total Amount of Target Compound Detected in Flue Gas Sample
Ms (ng/g)	Total Amount of Target Compound Detected in the Sludge Feed Sample
MSW (ng/l)	Total Amount of Target Compound Detected in the Scrubber Water Feed Sample
P (g)	Total Particulate Catch on the Filter
RMP	Ratio of the Metal Emissions to the Total Particulate Catch
FV (mg/hr)	Volatiles Feed Rate
DVF	Dry Volatiles Sludge Feed Rate
FSV (mg/hr)	Semi-Volatile Feed Rate
FM (mg/hr)	Metal Feed Rate
OSW	Scrubber Water Volumetric Flow Rate
VM (dscm)	Standard Volume of Gas Sampled (Dry Basis)
ER _p	Particulate Emission Rate
EF _p	Particulate Emission Factor
*** EPA	
Standard Conditions	Temperature = 68 deg ⁰ F (528 deg ⁰ R) Pressure = 29.92 inches of mercury

SAMPLE CALCULATIONS

Plant Site: 2
Sampling Location: Inlet
Date: 4/30/87
Time Period: 14:20 - 16:34

Example #2: Semi-Volatiles; Run #1
Semi-Volatiles: Naphthalene (NA)

- 1) Concentration of semi-volatiles (NA) in the stack gas sampled, (ug/dscm):

$$C = M/VM$$

$$C = 370 \text{ ug}/1.341 \text{ dscm}$$

$$C = 275.9 \text{ ug/dscm}$$

- 2) Concentration of semi-volatiles (NA) in the stack gas sampled corrected to 12% CO₂, (ug/dscm):

$$C (\text{CO}_2) = C * CF (12\% \text{ CO}_2)$$

$$C (\text{CO}_2) = 275.9 \text{ ug/dscm} * 12/8.6$$

$$C (\text{CO}_2) = 197.7 \text{ ug/dscm, adjusted to } 12\% \text{ CO}_2$$

- 3) Emission rates of semi-volatiles (NA), (g/hr):



$$258.12 \text{ dscm} * 60 \text{ min/hr} * 10^{-6} \text{ ug}$$

4) Sludge feed rate, (g/hr):

$$FSV = MS * FS$$

$$FSV = 6600 \text{ ng/g} * 6.82 \text{ ton/hr} * 907.186 \text{ kg/ton} * 10^6 \text{ g/kg} * 10^9 \text{ kg/ng} * 10^{-3} \text{ kg}$$

$$FSV = 43.35 \text{ g/hr}$$

5) Emission factors of semi-volatiles (NA):

$$EF = ER/FS$$

$$EF = 4.27 \text{ g/hr} / 43.35 \text{ g/hr}$$

$$EF = 0.099 \frac{\text{g NA emitted}}{\text{g NA fed}}$$

SAMPLE CALCULATIONS

Plant Site: 2
Sampling Location: Inlet
Date: 4/30/87
Time Period: 14:20 - 16:34

Example #3: VOST; Run #1
Volatile: Chlorobenzene (CB)

- 1) Concentration of volatiles (CB) in the stack gas sampled, (ug/dscm):

$$C = M/V_m$$

$$C = 396.00 \text{ ng}/18.73 \text{ dscm} * 10^3 \text{ ug/mg} * 10^{-3} \text{ ug/dscm}$$

$$C = 21.1 \text{ ug/dscm}$$

- 2) Concentration of volatiles (CB) detected in the stack gas sampled corrected to 12% CO₂, (ug/dscm):

$$C (\text{CO}_2) = C * CF (12\% \text{ CO}_2)$$

$$C (\text{CO}_2) = 21.1 * 12/3.80$$

$$C (\text{CO}_2) = 66.7 \text{ ug/dscm, adjusted to } 12\% \text{ CO}_2$$

- 3) Dry volatile sludge feed rate (metric ton/hr)

$$\text{DVF} = \% \text{ vol} * \text{FS}$$

$$\text{DVF} = 0.1425 * 748 \text{ metric ton/hr}/1.10156 \text{ ton/metric ton}$$

$$\text{DVF} = 0.938 \text{ metric ton/hr}$$

- 4) Emission of volatiles (CB) per ton of volatile solids feed, (mg/metric ton):

$$\text{EV} = C * \text{Flow}/\text{DVF}$$

$$\text{EV} = 21.1 \text{ ug/dscm} * 258 \text{ dscm}/0.942 * 60 \text{ min/hr} * 10^3 \text{ mg/ug}$$

$$\text{EV} = 346.7 \text{ mg/metric ton}$$

5) Emission rate of volatiles (CB), (g/hr):

$$ER = EV * DVF$$

$$ER = 346.7 \text{ mg/metric ton} * 0.938 \text{ metric ton/hr}$$

$$ER = 0.327 \text{ g/hr}$$

4) Sludge feed rate, (g/hr):

$$FV = MS * FS$$

$$FV = 1100 \text{ ng/g} * 7.24 \text{ ton/hr} * 907.186 \text{ kg/ton} * 10^3 \text{ g/kg} * 10^6 \text{ ug/kg} \\ 10^{-9} \text{ kg/ng}$$

$$FSV = 7.22 \text{ g/hr}$$

5) Emission factors of volatiles (CB) per sludge feed;
($\frac{\text{g volatile emission}}{\text{g sludge feed}}$):

$$EF = ER/FSV$$

$$EF = 0.327 \text{ g/hr} / 7.72 \text{ g/hr}$$

$$EF = 0.045 \frac{\text{g CB Emitted}}{\text{g CB Fed}}$$

SAMPLE CALCULATIONS

Plant Site: 2
Sampling Location: Inlet
Date: 5/2/87
Time Period: 16:15 - 19:32

Example #1: Metals (Short-Term); Run #1
Metal: Cadmium (Cd)

- 1) Concentration of metals (Cd) in the stack gas sampled, (ug/dscm):

$$C = M/VM$$

$$C = 320.00 \text{ ug}/1.5563 \text{ dscm}$$

$$C = 205.62 \text{ ug/dscm}$$

- 2) Concentration of metals (Cd) in the stack gas sampled corrected to 12% CO₂, (ug/dscm):

$$C (\text{CO}_2) = C * CF (12\% \text{ CO}_2)$$

$$C (\text{CO}_2) = 205.62 \text{ dscm} * 12/7.12$$

$$C (\text{CO}_2) = 346.55 \text{ ug/dscm, adjusted to 12\% CO}_2$$

- 3) Emission rates of short-term metals (Cd), (g/hr):

$$ER = C * Flow$$

$$ER = 205.62 \text{ ug/dscm} * 295.29 \text{ dscm} * 60 \text{ min/hr} * \text{g}/10^6 \text{ ug}$$

$$ER = 3.64 \text{ g/hr}$$

- 4) Sludge feed rate, (g/hr):

$$FM = MS * FS$$

$$FM = 8850 \text{ ng/g} * 1.351 \text{ ton/hr} * 907.186 \text{ kg/ton} * 10^3 \text{ g/kg} * 10^6 \text{ ug/kg} * 10^{-9} \text{ kg/ng} * 1.10156 \text{ ton/metric ton}$$

$$FM = 11.95 \text{ g/hr}$$

- 5) Emission factor of short-term metals (Cd), ($\frac{\text{g metals emissions}}{\text{g dry metals feed}}$):

$$EF = ER/FS$$

$$EF = 3.64 \text{ g/hr} / 11.95 \text{ g/hr}$$

$$EF = 0.305 \frac{\text{g Cd emitted}}{\text{g Cd fed}}$$

- 6) Particulate emission factors, ($\frac{\text{g particulate}}{\text{kg dry sludge feed}}$):

$$EF_p = ER_p/FS$$

$$EF_p = 13710 \text{ g/hr} * 1.351 \text{ metric ton/hr} * 0.00102 \text{ kg/metric ton}$$

$$EF_p = 18.89 \frac{\text{g particulate}}{\text{kg dry sludge feed}}$$

- 7) Ratio of metals to particulates mass emissions,
($\frac{\text{ug metals}}{\text{g particulates}}$):

$$RMP = M/P$$

$$RMP = 320.0 \text{ ug} / 1.204 \text{ g}$$

$$RMP = 265.7 \frac{\text{ug metal}}{\text{g particulates}}$$

APPENDIX C

**ADDITIONAL COMPONENTS DETECTED
DURING ANALYSIS OF SAMPLES
COLLECTED AT SITE 2**

**ADDITIONAL COMPONENTS DETECTED
DURING ANALYSIS OF SAMPLES
COLLECTED AT SITE 2**

The following are lists of additional semi-volatile and volatile compounds detected in the samples taken at Site 2 of the Sewage Sludge Incineration Study. These additional compounds were detected in the train, scrubber water, and sludge samples taken during each test run. The semi-volatile compounds are listed as detected per run and grouped according to sample type (train components, scrubber water, and sludge feed). Some semi-volatiles may be listed more than once per run and some may be named differently depending on the test run. The volatiles are grouped per sample type only in the summary table and are listed per trap and sample type in the tables which follow the Volatiles Summary Table. All of these lists are raw data results from the Radian laboratories.

ADDITIONAL SEMI-VOLATILE COMPOUNDS

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

7- Sample Identification 5A7D 950

Calculated By HT

(Run 02-In -5w)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 1223	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
367	<i>dimethyl sulfide</i>	3	7471	37631	40 ug/L
846	<i>C₉H₁₄ unknown</i>	2	5071		30 ug/L
795	<i>C₁₀H₁₈O</i>	3	70143		40 ug/L
1019	<i>C₁₀H₁₆ unknown</i>	3	5183		30 ug/L
1034	unknown	3	8367		50 ug/L
1065	unknown	3	6359		40 ug/L
1095	<i>C₁₂H₁₈O₂</i>	3	13951		80 ug/L
1107	<i>C₁₀H₁₈O₂ unknown</i>	3	47359		280 ug/L
1195	<i>C₆-alkylbenzene</i>	3	18015		110 ug/L
1587	<i>tetra decene</i>	3	8007		50 ug/L

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIANSample Identification 5AAD 949Calculated By A

(Run 01 In-Sw) Southwater

SCAN NUMBER	COMPOUND IDENTIFICATION	ID	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
800	$C_{10}H_{18}O$	2	78847	33407	470 ~~520~~ ug/L
1249	ester of propionic acid	2	60927		360 ~~400~~ ug/L
1367	thalliconic acid	2	3783		20 ug/L
1408	~~undecanoic acid~~ $C_{10}H_{16}$	2	42927		560 ~~610~~ ug/L
1421					
1813	ESTER OF undecanoic acid	2	50495		300 ~~330~~ ug/L

RECEIVED

Calculated By D

(Run 03-In-Sw)

[illegible]

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification 5AAD951

C-10

Calculated By TD

(Run 03-In-Sw)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 1 > 2 > 3	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
177	cyclohexene	1	36927	52223	140 ug/L
853	heptanediene	2	7903		30 ug/L
967	unknown	3	6239		25 ug/L
989	methylcyclohexene methanol	2	14927		60 ug/L
1005	~~5AAD951~~ C ₈ H ₁₀ O	2	22847		90 ug/L
1025	C ₁₀ H ₁₆ methanol	3	23423		90 ug/L
1038	C ₁₀ H ₁₆	3	23999		90 ug/L
1086	unknown	3	72525		280 ug/L
1407	unknown	3	15563		60 ug/L
1421	unknown	3	51407		200 ug/L

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

CHROMATOGRAPHY

Sample Identification 5A10953Calculated By 10

(Run 04-In-5u)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 1223	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
177	cyclohexene	1	32127	56447	115 ug/L
799	Substituted cyclopentanol	2	66303		230 ug/L
1086	unknown	3	91135		320 ug/L
1250	Substituted propionic acid	2	26303		70 ug/L
1504	hexadecenoic acid	2	74111		260 ug/L
1515	unknown	3	37951		130 ug/L
1812	~~Substituted~~ hexadecenoic acid		18131	✓	63 ug/L

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN
CORPORATIONSample Identification SAD 952Calculated By R

(Run 06 - In - Sw)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 1223	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
791	substituted 446 pentanol	2	37887	48639	160 ug/L
981	unknown ~~cyclopentanol~~	2	8735		36 ug/L
1001	unknown	3	8103		35 ug/L
1021	C ₁₀ H ₁₈	2	7775		30 ug/L
1034	unknown	3	7575		30 ug/L
1085	unknown	3	38655		160 ug/L
1247	diethyl pentolate	1	21549		90 ug/L
1408	unknown ~~substituted pentanol~~	23	6255		25 ug/L

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN
CALCULATIONSample Identification 544055Calculated By RD

(Run 01 - Out - SW)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17273	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
346	dimethyl sulfoxide	2	59583	45759	260 ug/L
794	substituted cyclopentanol	2	73983		320 ug/L
1066	unknown	3	35839		160 ug/L
1710	unknown	3	153087		670 ug/L
1797	unknown	3	19199		80 ug/L
1589	Dodecanediol ~~hexadecanediol~~	X2	61823		270 ug/L
1814	ester of hexanedioic acid	2	21887	✓	100 ug/L

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

CJCEP SUR. TLO:3

Sample Identification 5A10454Calculated By AB(-Run 05-En-Sw)

SCAN NUMBER	TENTATIVE IDENTIFICATION	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
780	unidentified	82047	43047	380 ug/L
978	unknown	10927		50 ug/L
999	methoxypropyl benzene	12355		50 ug/L
1000	C ₁₀ H ₁₆	9919		45 ug/L
1374	Atrazine	9487		40 ug/L
1067	methy/sulfonil benzene	5119	✓	20 ug/L

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

CHICAGO, ILL.

Sample Identification 5H10957Calculated By TD

(Run 02-0ut-5w)

SCAN NUMBER	COMPOUND IDENTIFICATION	RET. TIME (min)	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TEST. COMPOUND
358	Dimethylsiloxane	2.23	68351	48127	280 ug/L
500	Silicone oil	1.51	5127		20 ug/L
543	~~unknown~~ C ₈ H ₁₄	3	7127		30 ug/L
795	C ₁₀ H ₁₈ O unsaturated cyclopentanol	2	37951		160 ug/L
981	unknown	3	9407		40 ug/L
1019	C ₁₀ H ₁₈ O	2	8831		40 ug/L
1033	unknown	3	11119		50 ug/L
1065	unknown	3	19135		80 ug/L
1085	unknown	3	21375		90 ug/L
		2	14793		60 ug/L

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

CHROMATOGRAPHY

Sample Identification 5AAD756Calculated By RA

(Run 03-0ut-5W)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 1223	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
213	<i>C5H10</i> unknown	3	10591	55679	46.45 µg/L
585	benzaldehyde	1	17695		65 µg/L
797	substance cyclohexanone	2	34495		120 µg/L
1086	unknown	3	46782		170 µg/L
1408	substance cyclohexanone	2	15245		50 µg/L
1812	substance cyclohexanone	2	9311		30 µg/L

Sample Identification 541D-158

Calculated By GD

RADIAN
CORPORATION

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[illegible]

Calculated By PA

RADIAN

[illegible]

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

CHROMATOGRAPHY

Sample Identification 5HA1X103Calculated By 10

(Run 05-Oct-50)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 122>3	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
204	~~unknown~~ unidentified	3	5797	51591	20 ug/L
404	thioanisole + unknown	2	3843		14 ug/L
414	unknown benzophenone	2	7751		30 ug/L
799	substituted cyclopentanone	2	20039		75 ug/L
834	unknown	3	5479		20 ug/L
982	unknown	3	4551		20 ug/L
1085	unknown	3	36287		130 ug/L
1270	diethyl phthalate	1	5599		20 ug/L
1372	unknown	2	5983		20 ug/L

RADIAN CORPORATION

Calculated By PE

(Run off - Out-Sw)

[illegible]

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADONSample Identification 5AAD966Calculated By PD

(Run 02-In-Sw) duplicate

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17223	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
177	$C_6H_{10} + C_6H_{12}$	2	8863	54783	~~6~~ 30 μ g/L
376	Dimethyl Sulfide	2	20895		~~16~~ 75 μ g/L
511	Sulfonylbis methine	2	5482		~~14~~ 20 μ g/L
551	unknown C_8H_{14}	~~2~~	10591		~~8~~ 40 μ g/L
982	Unknown	3	9039		~~7~~ 35 μ g/L
1003	unknown	3	12735		~~7~~ 45 μ g/L
1022	substituted triolein unknown $C_{50}H_{116}$	2	14203		~~11~~ 55 μ g/L
1084	unknown	3	30911		~~28~~ 120 μ g/L
1401	unknown	3	~~34023~~		~~57~~ 285 μ g/L
1795	unknown	3	34071		~~21~~ 140 μ g/L

Calculated By JF

(Rain Up - Dust - Sec)

RADIAN COLLECTION

[illegible]

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification SAA0968

Calculated By JD

(Method Blank) (Sw-In)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 1223	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
177	cyclohexene	2	8495	60927	X 30 ug/L
199	Unknown	3	4615		X 15 ug/L
380	siloxane column	3	1189		X 5 ug/L
425	methyl hexanone	2	2607		X 10 ug/L
1790	Isobutyronitrile	2	1449		X 5 ug/L
1812	ester of hexanoic acid	1	4511		X 15 ug/L

THE

Calculated By AD

(Parr v2 - I_n - Sw) duplicate

[illegible]

Calculated By AD

(Method Blank)

RADIAN CORPORATION

[illegible]

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN
CALCULATIONSample Identification 5HDD973Calculated By PD

(Run 06-In-Sw) duplicate

SCAN NUMBER	COMPOUND IDENTIFICATION	ID # 12223	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
177	Cyclohexene	1	14031	75391	7
537	Unknown	3	61311		40
620	Benzonitrile	1	13871		8
772	Unknown	3	61311		40
798	~~Unknown~~	2	23327		14
1071	Unknown	3	35197		20
1086	Unknown	3	53439		30
1502	Hexadecanoic acid	1	4919		6
1515	benzyl butyl nitrate	1	19143		10

Sample Identification 5H7D975 (cont'd)
(Run 01-5F)

Calculated By

RADIAN CORPORATION

[illegible]

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN
CALCULATIONSample Identification SA1D475Calculated By JD(Run 01-SF) Sledge Feed

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 12223	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
550	nonanoic acid	1	51919	64639	2235 20
733	cis-9-methyl- undecanoic acid	1	257023		140
932	benzoic acid	1	34543		20
976	unknown	3	49727		30
1058	methyl iodide	1	38015		20
1213	dodecanoic acid	1	62975		35
1275	tetradecanoic acid	2	237823		130
1447	pentadecanoic acid	3	101375		60
1522	hexadecanoic acid		160179		50
1576	C ₁₂ H ₂₆ O ₂		172077		70

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN
CORPORATIONSample Identification 5A12477Calculated By 0

(Run 03-SF)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 1 > 2 > 3	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
556	Hexanoic Acid	2	89215	97663	42 220 ug/g
734	~~acetal~~ ~~methyl phenol~~	1	467455		42 1200 ug/g
934	benzenecarboxylic acid	1	73471		30 180 ug/g
977	unknown	3	95871		42 210 ug/g
1069	methyl indole	1	85119		30 210 ug/g
1211	~~docosanoic acid~~ ~~undecanoic acid~~	2	81223		30 210 ug/g
1374	~~tetradecanoic acid~~ ~~undecanoic acid~~	2	377343		450 940 ug/g
1448	~~pentadecanoic acid~~ ~~undecanoic acid~~	3	138751		60 340 ug/g
1530	~~heptadecanoic acid~~ ~~undecanoic acid~~	2	1038330		430 2600 ug/g
1764	~~carboxylic acid~~ ~~undecanoic acid~~	3	17231		30 200 ug/g

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN
CORPORATION

C-30

Sample Identification SANDY Hc

Calculated By B

(Run 03-SF)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 1 > 2 > 3	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
499	Heptanoic Acid	1	34991	70783	~~71~~ 80 ug / 05.
725	~~octyl~~ ^{caproic} pentanoic acid	1	144895		~~85~~ 80 475 ug / 9
934	butyric acid	1	50815		~~21~~ 30 170 ug / 9
974	C ₁₃ H ₂₈	2	32767		~~18~~ 20 110 ug / 3
1210	~~undecanoic acid~~ ^{undecanoic acid}	2	54207		~~21~~ 30 180 ug / 3
1441	~~tridecanoic acid~~ ^{tridecanoic acid}	2	63743		~~21~~ 0 210 ug / 3
1535	heptadecanoic acid	3	85291		480 2800 ug / 5
1561	nonadecanoic acid	3	43322		20 170 ug / 3
1591	C ₁₂ H ₂₆ O ₂	3	79871		50 260 ug / 3
1627	octadecanoic acid	3	817171		460 2700 ug / 3

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN
CORPORATIONSample Identification 5H4D978Calculated By JD(Run 24 - SF)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 1223	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
532	hexanoic Acid	1	58339	86783	30 180 ug/l9
729	<i>creosol</i> methylphenol	1	418815		190 1300 ug/l9
932	benzoic acid	1	129151		60 290 ug/l9
976	unknown	3	86655		40 216 ug/l9
1214	<i>dodecanoic acid</i> ~~butyryl dodecanoate~~	3	87167		40 260 ug/l9
1376	<i>tridecanoic acid</i> ~~unknown~~	3	449535		210 1400 ug/l9
1448	<i>pentadecanoic acid</i> ~~unknown~~	3	198711		90 600 ug/l9
1532	<i>heptadecanoic acid</i> ~~unknown~~	3	417503		420 2800 ug/l9
15651	<i>carboxylic acid</i> ~~unknown~~	3	82047		40 25.1 ug/l9
1571	<i>C₁₂ H₂₆ O₂</i> ~~unknown~~	3	361771		170 1000 ug/l9

541097 (contd)

Calculated By

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RADIAN CORPORATION

[illegible]

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN
CORPORATIONSample Identification 34AD985Calculated By D

(Run 05-SF)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17273	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
177	cyclohexene	1	65023	78335	
546	hexanoic acid	1	74879		
564	curene	1	114554		
681	method not identified C ₄ -alkylbenzene	1	88447		
931	benzenesulfonic acid	1	34687		
978	unknown	3	52007		
1592	C ₁₂ H ₂₄ O ₂ tridecanoic acid	2	258559		

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN
CORPORATIONSample Identification 5970987Calculated By P

(Run 03-SF) duplicate

SCAN NUMBER	COMPOUND IDENTIFICATION	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
560	Carvacrol (C ₁₀ H ₁₄ O)	191999	110463	70
734	capric acid	442587		160
934	benzoic acid	68075		20
977	unknown	94207		30
1064	methyl indole	7923		3
1101	C ₁₁ H ₂₄ trimethylacetone	68351		20
1215	dodecanoic acid	118397		40
1246	C ₁₉ H ₄₀ tetramethylheptadecane	62911		20
1377	tetradecanoic acid	474623		170
1449	pentadecanoic acid	102575		1

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

CHROMATOGRAPHY

Sample Identification 5A40986Calculated By PD

(Run 06-5F)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17223	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
545	Hexanoic Acid	2	88063	110463	30
935	benzoic acid	1	86783		30
972	$C_{13}H_{28}$ ethylmethyl decane	2	81989		30
1102	$C_{15}H_{32}$ trimethyl decane	2	80747		30
1327	$C_{19}H_{40}$ dimethyl undecane	2	67087		30
1378	tetradecanoic acid	2	433663		160
1449	pentadecanoic acid	3	169215		60
1513	$C_{12}H_{26}O_2$ tetradecanoic acid	1	377343		140

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN
CORPORATIONSample Identification 5110983Calculated By FD

(Run 06-5F) duplicate

SCAN NUMBER	COMPOUND IDENTIFICATION	ID	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
537	benzoic acid	2	59135	119935	20
674	C ₉ -alkylbenzene	1	172799		60
731	cresol	1	391167		130
764	C ₁₀ H ₁₂ N ₂ amine	3	192511		64
1029	methyl iodide	1	84911		30
1161	unknown	3	80511		30
1214	dodecanoic acid	1	183671		60
1328	C ₉ H ₁₀ O	1	97919		30
1317	tetradecanoic acid	3	673439		140
		3	673439		

(γ, ρ_w) - 7.86 (1445)

Calculated By 17

RADIAN CORPORATION

[illegible]

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN
CORPORATIONSample Identification 5AA-031Calculated By P

(Run 03-024)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17273	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
515	unknown	3	62527	19455	1800 μ g
592	unknown	3	22583		690
634	unknown	3	35583		1000
669	unknown ~~Acetylcholine~~	3	52671		1500
707	unknown	3	4285		1200
733	unknown	3	112511		3300
776	unknown ~~dimethylamine~~	3	66303		1900
815	unknown ~~Trimethylamine~~	3	190973		5800
987	unknown	3	48895		1400

RADIAN
CORPORATION

Sample Identification 54410158 (cont'd)

(Room 26-SF) Apartment

[illegible]

Sample Identification 5AAE033

(Run CI - Fa)

RADIAN CORPORATION

Calculated By PH

[illegible]

5A4F032

SAFE 032
Fay's Method Blank - Indist

Calculated By

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RADIAN CORPORATION

[illegible]

RADIAN CORPORATION

Sample Identification

59A-E-034

5

Calculated By DE

[illegible]

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN
CORPORATION

Sample Identification SALE034

Calculated By TD

(Run 02 - In)

SCAN NUMBER	COMPOUND IDENTIFICATION	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
552	1-methyl-2-naphthol <chem>C1=CC=C2C(=C1)C(=C(C=C2)O)C</chem> <chem>C9H8O</chem>	38463	31903	570 ug
596	1,2-dimethyl-3-naphthol <chem>C1=CC=C2C(=C1)C(=C(C=C2)O)C</chem> UNKNOWN	5887		87
734	1,2-dimethyl-3-naphthol	43711		650
983	1-methyl-2-naphthol	61119		900
998	1-methyl-2-naphthol UNKNOWN	54335		800
1119	1-methyl-2-naphthol	51519		700
1188	1-methyl-2-naphthol UNKNOWN	3319		49
1242	1-methyl-2-naphthol UNKNOWN	8879		130
1415	1-methyl-2-naphthol	27039		400

RADIAN CORPORATION

Sample Identification 5AAE-035

(Rem 03-1.2)

Calculated By: PT

[illegible]

5K D-7465

Calculated By PT

RADIAN CORPORATION

Feldbach-Park

[illegible]

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN
CORPORATIONSample Identification SA16044Calculated By DB

(Run 05-11)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 1>2>3	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
628	benzotrile ~~isopropylbenzene~~	1	364543	22655	3200 ug
719	unknown	3	396287		3500 ug
872	C ₂ -alkyl phenol + ~~unknown~~ C ₁₁ H ₂₄ + ~~unknown~~	3	82431		730 ug
999	phthalic anhydride	1	70015		620 ug
1023	ethylbenzoic acid	2	4523		39 ug
1173	naphthalene carbonitrile ~~isocyanonaphthalene~~	1	22943		200 ug
1195	dibenzoturan + isocyanonaphthalene	1	27903		250 ug

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

CELEBRATION

Sample Identification 5AAE048

(Run 01 - Out)

Calculated By TD

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17273	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
703	unknown	3	78207	44735	430ug
773	unknown	3	17087		95ug
822	Benzoic Acid	2	70655		390ug
849	unknown	3	232959		1300ug
1024	phenyl acetic acid unknown	2 3	18271		100ug
1112	unknown	3	15663		87ug
1318	methyl pentamphic acid anhydride	2	28415		160ug

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN
CALCULATIONS

Sample Identification 5AAL047

Calculated By B

(Rencor-TA)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 1223	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
598	unknown	3	5943	38399	100ug
709	unknown	3	125439		2200 ug
813	unknown	3	14255		250ug
816	unknown	3	106751		1900ug
1183	unknown	3	19839		350ug
	hydrogenated compounds, probably alkyd alcohols				

Sample Identification 5A4E049

(Run 02 - out)

RADIAN CORPORATION

Calculated By PA

[illegible]

(Pam 04: Out)

Calculated By

RADIAN CORPORATION

[illegible]

Sample Identification SAAE051

(Rem US - Cont)

RADIAN CORPORATION

Calculated By

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[illegible]

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

CJSP-3812.710-3

Sample Identification 5AAG054Calculated By P

(Run 06 - Cut)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID # 2 > 3	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATED AMOUNT OF TENT. COMPOUND
156	~~benzoic acid~~		34879		~~240~~
545	~~benzoic acid~~	1	110847	34879	640
987	ethyl pentanoate	2	330751		1900
702	propyl pentanoate	2	31023		920
736	$C_6H_{10}O$	2	332287		1900
1025	$C_9H_{12}O_2$	3	154111		880
1347	propyl pentanoate	2	91775		530

ADDITIONAL VOLATILE COMPOUNDS

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

C-57

10 Identification SADQ 700
(Run 02)

Calculations by R

SCAN NUMBER	COMPOUND IDENTIFIED	ID	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TENT. COMPOUND $\frac{\text{Peak Area} \cdot \text{Concentration of I.S.}}{\text{Peak Area} \cdot 1}$
1074	<chem>C10H20</chem> hydrocarbon	2	44096	6984	38,000 $\mu\text{g/kg}$
1128	<chem>C10H18</chem>	2	201884	6984	173,000 $\mu\text{g/kg}$
1185	<chem>C10H20</chem> hydrocarbon	2	105600	6984	90,000 $\mu\text{g/kg}$
1218	<chem>C10H16</chem>	2	135936	6984	117,000 $\mu\text{g/kg}$
1236	<chem>C10H20</chem> decane	1	114176	6984	98,000 $\mu\text{g/kg}$
1271	Trimethyl benzene	1	62336	6984	53,000 $\mu\text{g/kg}$
1310	<chem>C10H16</chem>	2	89216	6984	76,000 $\mu\text{g/kg}$
1366	<chem>C11H22</chem> undecane	2	217080	6984	211,000 $\mu\text{g/kg}$
1409	<chem>C11H22</chem> undecane	2	115584	6984	99,000 $\mu\text{g/kg}$

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

C-58

File Identification SAAD701

(Run 01)

Calculations by B

SCAN NUMBER	COMPOUND IDENTIFICATION	ID	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND $\text{Peak Area} \cdot \text{Concentration of I.S. Std.} \div \text{Peak Area of I.S.}$
1124	~~C₁₀H₁₆~~	~~1~~	27488	6168	252,000 $\mu\text{g/kg}$
1180	~~C₁₀H₂₀ hydrocarbon~~	~~2~~	8016	6168	73,000 $\mu\text{g/kg}$
1212	~~C₁₀H₁₆~~	~~1~~	13808	6168	126,000 $\mu\text{g/kg}$
1230	C ₁₀ H ₂₂ decane	1	8656	6168	79,000 $\mu\text{g/kg}$
1265	Trimethyl benzene	1	5816	6168	53,000 $\mu\text{g/kg}$
1313	~~C₄-alkylbenzene~~	~~1~~	58688	6168	537,000 $\mu\text{g/kg}$
1304	~~C₁₀H₁₆~~	~~1~~	7376	6168	68,000 $\mu\text{g/kg}$
1403	~~undecane~~	~~1~~	11344	6168	104,000 $\mu\text{g/kg}$
1505	dodecane + undecane	1	17751	6168	16,000 $\mu\text{g/kg}$
1645	unknown, methyl	2	2692	6168	25,000 $\mu\text{g/kg}$

59
 No identification SAD710
 (Run 03)

Calculations By D

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17273	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND $\frac{\text{Peak}_{\text{test}} \cdot \text{Concentration of I.S.}}{\text{Peak}_{\text{IS}} \cdot 1}$
270	acetone unknown	31	1116	14528	1920 $\mu\text{g/kg}$
724	unknown	3	148	14528	255 $\mu\text{g/kg}$
1056	xylene + C_9H_{18}	1	1152	14528	1980 $\mu\text{g/kg}$
1073	hydrocarbon C_9H_{20} ~~$\text{C}_{10}\text{H}_{22}$~~	2	664	14528	1140 $\mu\text{g/kg}$
1099	$\text{C}_{10}\text{H}_{20}$	2	1632	14528	2810 $\mu\text{g/kg}$
1154	$\text{C}_{10}\text{H}_{20}$	3	28064	14528	48,000 $\mu\text{g/kg}$
1209	$\text{C}_{10}\text{H}_{20}$	2	5606	14528	9640 $\mu\text{g/kg}$
1244	$\text{C}_{10}\text{H}_{20}$	2	12912	14528	22220 $\mu\text{g/kg}$
1261	decane ~~$\text{C}_{10}\text{H}_{22}$~~	2	5152	14528	8860 $\mu\text{g/kg}$
1298	C_9 -alkylbenzene ~~$\text{C}_{11}\text{H}_{24}$~~	2	5080	14528	8740 $\mu\text{g/kg}$

Identification SA70710 (cont'd)

(Run 03)

Calculations By B

[illegible]

to Identification SAD711
(Run 04)

Calculations by D

SCAN NUMBER	COMPOUND IDENTIFICATION	IO	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND $\frac{\text{Peak}_{\text{test}} \cdot \text{Concentration of I.S.}}{\text{Peak}_{\text{IS}} \cdot 1}$
1066	~~nona~~ ~~CH₃~~	3	879	15664	1250 $\mu\text{g/kg}$
1091	~~C₁₀H₁₈~~	3	2260	15664	3370 $\mu\text{g/kg}$
1146	~~C₁₀H₁₈~~	2	45248	15664	66,900 $\mu\text{g/kg}$
1179	~~C₁₀H₁₈~~	2	4216	15664	6230 $\mu\text{g/kg}$
1164	~~C₁₀H₁₈~~	2	3200	15664	4729 $\mu\text{g/kg}$
1235	~~C₁₀H₁₈~~	2	19328	15664	28,600 $\mu\text{g/kg}$
1252	~~decane~~ ~~C₁₀H₂₂~~	2	6134	15664	9100 $\mu\text{g/kg}$
1288	~~C₃-allylbenzene~~ ~~C₁₀H₁₈~~	2	6494	15664	9600 $\mu\text{g/kg}$
1326	~~C₁₀H₁₈~~	2	10366	15664	15,300 $\mu\text{g/kg}$
1334	~~C₃-allylbenzene~~ ~~C₁₀H₁₈~~	2	115328	15664	170,000 $\mu\text{g/kg}$

File Identification 57AD711 (cont)
(Run 04)

Calculations by B

[illegible]

File Identification SAA0712
(Run 05)

Calculations By P

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17273	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND $\frac{\text{Peak}_{\text{test}} \cdot \text{Concentration of I.S.}}{\text{Peak}_{\text{IS}} \cdot 1}$
273	acetone ~~unknown~~	1	2987	10608	6600 $\mu\text{g/lk}$
1089	$\text{C}_{10}\text{H}_{20}$	3	2492	10608	5500 $\mu\text{g/lk}$
1143	$\text{C}_{10}\text{H}_{16}$	3	54656	10608	121,000 $\mu\text{g/lk}$
1199	$\text{C}_{10}\text{H}_{20}$	2	11264	10608	25,000 $\mu\text{g/lk}$
1232	$\text{C}_{10}\text{H}_{16}$	2	23040	10608	51,000 $\mu\text{g/lk}$
1250	decane ~~$\text{C}_{10}\text{H}_{22}$~~	2	6312	10608	14,000 $\mu\text{g/lk}$
1286	$\text{C}_{11}\text{-alkylbenzene}$ ~~$\text{C}_{11}\text{H}_{22}$~~	2	5312	10608	12,000 $\mu\text{g/lk}$
1306	$\text{C}_{10}\text{H}_{16}$	2	1360	10608	3,000 $\mu\text{g/lk}$
1324	$\text{C}_{10}\text{H}_{16}$	2	15840	10608	35,000 $\mu\text{g/lk}$
1333	$\text{C}_{11}\text{-alkylbenzene}$ ~~$\text{C}_{11}\text{H}_{22}$~~	2	105856	10608	234,000 $\mu\text{g/lk}$

Identification SAAD712 (cont'd)

Calculations By P

(Run 05)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17273	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND $\text{Amt. test} = \frac{\text{Peak Area} \cdot \text{Concentration of I.S.}}{\text{Peak Area} \cdot 1}$
1374	~~undecane~~ C ₁₁ H ₂₄	3	909	10608	2,000 ug/lks
1422	~~undecane~~ C ₁₁ H ₂₄	2	7144	10608	15,800 ug/lks
1428	C ₁₀ H ₁₆	2	6264	10608	14,000 ug/lks
1443	C ₁₄ -alkylbenzene ~~undecane~~	2	3032	10608	6700 ug/lks
1466	methyldecyl C ₁₅ -alkylbenzene	3	654	10608	1450 ug/lks
1468					

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17273	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND PLA _{test} - Concentration of I.S. PLA _{IS} - 1
1050	Xylene	1	1750	14752	2800 ug/lk _s
1068	~~nonane~~ ~~C₁₁H₂₄~~	2	1136	14752	1800 ug/lk _s
1093	C ₁₀ H ₂₀	2	3840	14752	6200 ug/lk _s
1148	C ₁₀ H ₁₆	2	61696	14752	100,000 ug/lk _s
1204	C ₁₀ H ₂₀	2	14544	14752	23,500 ug/lk _s
1238	C ₁₀ H ₁₆	2	24320	14752	39,200 ug/lk _s
1255	decane C ₁₀ H ₂₂	2	9616	14752	15,500 ug/lk _s
1291	C ₁₀ -alkylbenzene C ₁₀ H ₁₈	2	8168	14752	13,100 ug/lk _s
1329	C ₁₀ H ₁₆	2	15888	14752	25,600 ug/lk _s
1338	C ₁₀ -alkylbenzene C ₁₀ H ₁₈		156416	14752	252,000 ug/lk _s

File identification 5AAD713 (cont'd)
(Run 06)

Calculations by Hand

[illegible]

No Identification SAAD 714

(Run 06, dup)

Calculations by

P

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17273	SIG PEAK AREA OF TEST. COMPOUND	SIG PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND $\text{Amt. Test.} = \frac{\text{Peak Area} \cdot \text{Concentration of I.S.}}{\text{Peak Area} \cdot 1}$
1046	~~styrene~~ ~~C₈H₈~~	1	14416	14320	2500 $\mu\text{g/kg}$
1064	~~styrene~~ ~~C₈H₈~~	1	1182	14320	2100 $\mu\text{g/kg}$
1089	C ₁₀ H ₂₀	2	3252	14320	5700 $\mu\text{g/kg}$
1144	C ₁₀ H ₁₆	2	56448	14320	98,500 $\mu\text{g/kg}$
1200	C ₁₀ H ₁₈ C ₆ H ₂₀	3	13744	14320	24,000 $\mu\text{g/kg}$
1234	C ₁₀ H ₁₆	2	22816	14320	40,000 $\mu\text{g/kg}$
1251	~~styrene~~ ~~C₈H₈~~	1	9120	14320	16,000 $\mu\text{g/kg}$
1286	C ₈ -allylbenzene ~~C₈H₁₀~~	2	7096	14320	12,400 $\mu\text{g/kg}$
1326	C ₆ H ₁₀	2	13856	14320	27,000 $\mu\text{g/kg}$
1334	C ₈ -allylbenzene ~~C₈H₁₀~~	2	124800	14320	218,000 $\mu\text{g/kg}$

to identify SAD 714 (cont)

(Run 06, dup.)

Calculations by R

[illegible]

Sample Identification 59A0715

Calculations by B

(Run 05, matrix spike)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 1273	NET PEAK AREA OF TEST. COMPOUND	NET PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND mg/L test = $\frac{\text{Peak}_{\text{test}}}{\text{Peak}_{\text{std}}} \times \text{Concentration of I.S.}$
1383	~~C₁₀H₁₆~~ <i>C₁₀H₁₆ aromatic</i>	2	111788	15987	164,000 ug/Ls
1143	C ₁₀ H ₁₆	2	56768	15987	83,000 ug/Ls
1233	C ₁₀ H ₁₆	2	24448	15987	34,000 ug/Ls

SIGNATURE _____ DATE _____ CHECKED _____ DATE _____

 PROJECT 364-15 - VOST JOB NO. _____

 SUBJECT Scrubber Effluent Fat Conc. non-targets SHEET 1 OF 2 SHEETS

<u>File</u>	<u>Scan</u>	<u>est. conc. (ug/l)</u>	<u>Compound</u>
(Run 03, In)			
SAND683	594	0.8	thiophene
	695	1.0	~~thiophene~~
	1031	0.7	dibromomethane
	1181	1.2	Xylene
	1234	2.6	C ₁₀ H ₁₆
SAND684	686	0.6	C ₁₀ H ₂₂ decane
(Run 04, In)	701	1.1	dichloropropane
	709	1.4	dibromomethane
	784	0.7	bromodichloromethane
	484	2.5	dichloropropane
	1238	2.8	C ₁₀ H ₁₆
SAND685	740	1.0	C ₁₀ H ₂₂ decane
(Run 05, In)	702	0.7	dibromomethane
	1185	2.1	diethyl disulfide
	1319	3.3	C ₁₀ H ₁₆
	1369	10.1	dichlorobenzene
SAND686	702	1.0	dichlorobenzene
(Run 06, In)	1240	2.6	dibromomethane
	1321	4.0	C ₁₀ H ₂₂ decane
	1371	2.3	dichlorobenzene
SAND687		1.7	dichlorobenzene
(Run 01, In)		2.8	dibromomethane
		1.4	C ₁₀ H ₂₂ decane
		1.4	dichlorobenzene
		1.0	hydrocarbon
SAND688	695	1.0	dibromomethane
(Run 02, In)	1239	2.9	C ₁₀ H ₂₂ decane
	1319	2.0	dichlorobenzene
SAND689	702	0.9	dibromomethane
(Run 03, In)	1242	2.6	C ₁₀ H ₂₂ decane
dup.	1322	1.4	dichlorobenzene

SIGNATURE _____ DATE _____ CHECKED _____ DATE _____

PROJECT Sludge II JOB NO. _____

SUBJECT Similar 4500 Pot (one of non-targets) SHEET 2 OF 2 SHEETS

<u>file</u>	<u>scan</u>	<u>est conc %</u>	<u>compound</u>
SAAD690 (Run 03, EF)	706 1215 1278 1345		monomethane decane aldehyde nitrile
SAAD695 (Run 04, EF)	344 704 1242 1274	133 12 34 70	propenitrile dibromomethane decane benzaldehyde
SAAD696 (Run 01, In)	695 1183 1237 1317	12 61 33 46	dibromomethane $C_{10}H_{16}$ decane dichlorobenzene
SAAD697 (Run 05, EA)	1229 1308	33 14	decane dichlorobenzene
SAAD698 (Run 06, EF)	703	11	dibromomethane

Sample Identification 5AAD770
(Lab Blank)

Calculations By LC

Peak Number	Compound Identification	ID 1723	Net Peak Area of Ref. Compound	Net Peak Area of Internal Std.	ESTIMATE AMOUNT OF REF. COMPOUND PURITY • Concentration of I.S. Ref. Comp. ——— Purity • 1
883	heptane unknown	✓	931	19008	5ng
998			4632	19008	24ng
1087	nonane unknown	✓	1414	19008	7ng
1259	unknown	3	472	19008	2ng
1274	decane unknown	✓	1017	19008	5ng
1506	unknown	3	1472	19008	8ng
1525	unknown	3	3116	19008	16ng
1594	unknown	3	2452	19008	13ng

• Identification SAAD771

Calculations By LC

(Run 01, Inlet, Field Blank)

[illegible]

No Identification SAAD772

(Run 01-In-B)

Calculations by LC

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17273	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND $\frac{\text{Peak}_{\text{test}} \cdot \text{Concentration of I.S.}}{\text{Peak}_{\text{std}} \cdot 1}$
282	acetone, 50% ~~unknown - C10H12O~~	1	106880	45120	23709
635	~~nitrobenzene~~ nitrobenzene	3	292432	45120	53709
1074	xylene	1	296816	45120	64509
1362	~~C4-alkylbenzene +~~ ~~unknown - C10H12~~	3	310272	45120	68709
1410	iodobenzene ~~dichlorobenzene +~~	1	136704	45120	30309
1530	nitrobenzene	3	203008	45120	45009

to Identification SAAD773

(Run 01-IN-A)

Calculations by LC

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 12723	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND $\frac{\text{RIC}_{\text{test}}}{\text{RIC}_{\text{std}}} \times \text{Concentration of I.S.}$ Int. tests $\frac{\text{RIC}_{\text{std}}}{\text{RIC}_{\text{std}} \cdot 1}$
1274	unknown	3	215808	55552	38809
1363	C ₉ -aldehydes unknown	12	313344	55552	56409
1057	unknown	3	243456	55552	73809
949	unknown	3	468480	55552	84309
1531	unknown	3	97408	55552	17509
145	trans-trimethylsilane unknown	3	152064	55552	27409
1179	C ₉ -aldehydes unknown	12	295424	55552	53209
127	unknown	3			
127	unknown	3			
127	unknown	3			

10 Identification SARD 786

(Trip Blank)

Calculations by RD

C-76

SCAN NUMBER	COMPOUND IDENTIFICATION	ID D273	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND Peak - Concentration of I.S. Aut. test - $\frac{RIA_{IS}}{RIA_{IS} \cdot 1}$ In total ng
623	Butanol	2	547	14880	$\frac{4}{3.67}$
1187	Xylene	1	9344		$\frac{63}{62.8}$
1329	methylstyrene ~~C₁₀H₁₀~~	2	5744		$\frac{39}{38.6}$
1394	methylstyrene ~~C₁₀H₁₀~~	2	5896		$\frac{40}{39.6}$
1571	C ₂ -alkylstyrene ~~C₁₀H₁₂~~	2	292352		1965
1583	C ₂ -alkylstyrene ~~C₁₀H₁₂~~	2	223232		1500

Calculations By LC

(Lab Blank)

[illegible]

BRADMAN

Calculations by _____

5 AAO 785

[illegible]

C-78

Calculations by PD

(Run 01-Out-A)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17273	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND PMA _{test} - Concentration of I.S. Int. stds - $\frac{PMA_{IS}}{PMA_{IS} \cdot I}$ In total ng
398	CH ₃ I, ~~toluene~~ methyl ethyl sulfide	1	212480	41088	517
687	Chlorobenzene	1	151040		368
1327	C ₁₀ H ₁₆ hydrocarbon	2	230912		562
1460	C ₄ -alkylbenzene dichlorobenzene +	1	209664		510
1509	isobutylene dichlorobenzene +	1	135680	✓	330
C-79					

Sample Identification SAD 791

(Run 01-Out-B)

Calculations by D

SCAN NUMBER	COMPOUND IDENTIFICATION	ID	NO. PEAK AREA OF TEST. COMPOUND	NO. PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND $\frac{\text{Peak Area} \times \text{Concentration of I.S. Std.}}{\text{Peak Area of I.S. Std.}}$ in total ng
608	Chloroform	1	160768	39680	405
1325	~~C₁₀H₈ Indene~~	~~3~~	~~224768~~		~~566~~
1444	Dichlorobenzene + Benzobenzene	2	203264		512
1458	Cyrene + Dichlorobenzene +	1	213501		538
1507	Indobenzene + Dichlorobenzene +	1	119296		301
1762	Naphthalene + Anthracene	2	333312	↓	840
C-80					

RADIAN

C-81

10 Identification Run 1/OUT FB-B 400L

SAAD792 (Field Blank)

Calculations By

Scan	Compound Identification	ID	DIG PEAK AREA OF TEST. CORRECTED	DIG PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND PEAKS - Concentration of I.S. Std. test - $\frac{\text{PEAKS} \cdot I}{\text{In total ng}}$
1236	STYRENE	1	8240	39168	21.0
1446	benzene	1	2680	39168	6.84
1475	Benzonitrile	1	64256	39168	164
1571	C ₂ -alkylbenzene	1	17088	39168	43.6
1584	C ₂ -alkylbenzene	1	8528	39168	21.8
1595	Acetophenone	1	26368	39168	67.3
1668	C ₁₀ H ₁₈ O	3	5192	39168	13.3
1765	Naphthalene	1	47744	39168	122

Sample Identification (NW 1/4 IN-FB-A JAC-195
SAA0727 (Field Blank)

Calculations by PORCH

SEMI NUMBER	COMPOUND NAME	ID	NO. PEAK AREA OF TEST. COMPOUND	NO. PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND $\frac{\text{PEAK AREA} \times \text{CONCENTRATION OF I.S.}}{\text{PEAK AREA OF I.S.}}$ in total ng
1425	Benzonitrile	1	3664	24064	15.2
1444	dichloromethane	2	615	24064	2.56
1505	Picloric acid	3	188	24064	1.20
1666	Methane $C_{10}H_{16}$	3	269	24064	3.20
1761	Naphthalene	1	10688	24064	44.4
C-82					

is identification 5AAD 794

(Run 01-Out-C)

Calculations by TD

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17273	RIG PEAK AREA OF TEST. COMPOUND	RIG PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND Aut. test = $\frac{RIG_{test}}{RIG_{std}} \times 1$ in total ng
1235	~~styrene~~ ~~6-methyl~~	2	281088	43072	653
1324	~~C₁₀H₁₆ hydrocarbon~~	2	300032		697
1348	~~undecane~~ C ₁₀ H ₁₈ +	3	91648		213
1496	C ₁₄ -alkylbenzene dichlorobenzene +	1	249088		578
1505	isobutylene dichlorobenzene +	1	156672		364
1569	C ₁₂ -alkylbenzene C ₁₀ H ₁₂ sample	2	302592	↓	703

Calculations by P

(Run 01-out-FB-A) (Field Blank)

[illegible]

Calculations by $\mathcal{P}$

(Run 02-out-FB) (Field Blank)

[illegible]

C-85

Sample Identification 5AAD800

(Run 02-Out-C)

Calculations by PE

[illegible]

Calculations by P

(Run-02-Out-B)

[illegible]

Calculations by DE

(Run 02-Dwt-D)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID	RIG PEAK AREA OF TEST. COMPOUND	RIG PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND	
					ANAL. SAMPLE	IN TOTAL NG
398	Thiobis methylene	1	198656	35392		561
1335	styrene	2	313344			885
1323	C ₁₀ H ₁₆ hydrocarbon	2	173824			491
1496	dichlorobenzene	1	180224			509
1505	dichlorobenzene	1	111104			314
1509	styrene	1	282624			799

Calculations by LC

(Run 02-In-A)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND PMA _{test} - Concentration of I.S. Ant. test = $\frac{PMA_{IS}}{1}$
396	acetone, SO ₂	17273	139776	51904	26909
642	nitrobenzene	17273	191744	51904	36909
1053	nitrobenzene	3	199168	51904	38409
1409	benzothiazole	1	79616	51904	15309
1760	nitrobenzene	1	190464	51904	36709
C-90					

Sample Identification SAAD805

(Run 02-In-B)

Calculations By LC

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17273	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND PMA _{test} - Concentration of I.S. Aut. test = $\frac{PMA_{test}}{PMA_{IS} \cdot I}$
153	Propene	1	121600	54464	22309
208	~~acetone, SO₂, CO₂~~	~~3~~	~~130688~~	~~54464~~	~~24003~~
397	acetone	3	191232	54464	35109
1350			109312	54464	20109
1455	C ₁₄ -alkylbenzene dichloro benzene	1	102528	54464	18809
1504	indobenzene dichloro benzene	1	83968	54464	15409
1604			242688	54464	44609

Sample Identification 5AA0866

(Run 02-In-C)

Calculations by LC

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17273	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND $\frac{\text{RIC}_{\text{test}} \cdot \text{Concentration of I.S.}}{\text{RIC}_{\text{IS}} \cdot 1}$
397	SO ₂ , acetylene Carbon disulfide	3	117376	43008	260 ng
4456	dichlorobenzene	3	101888	43008	237 ng
1443	dichlorobenzene + chlorobenzene	3	201216	43008	468 ng
1505	indolene dichlorobenzene +	3	74624	43008	174 ng
1761	naphthalene C ₁₀ H ₈	4	82560	43008	192 ng
			297360	43008	482 ng
C-92					

Sample Identification 5AADB07

(Run 02-In-D)

Calculations By LC

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17273	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND $\text{Peak Area} \cdot \text{Concentration of I.S. Std.} \cdot \frac{\text{Peak Area}}{\text{Peak Area}}$
398	SO ₂ , acetone carbon disulfide	2	121856	58496	20809
482			149248	58496	25509
1457	dichloro benzene	1	9516	58496	16309
1505	indolene dichlorobenzene +	1	81664	58496	14009
1759	naphthalene C ₁₀ H ₈ aromatic	1	204288	58496	34909
1605			194048	58496	33209

Sample Identification SARAD808Calculations by LC

(Run 02-In-FB) (Full Blank)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17273	RIC PEAK AREA OF TEMP. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEMP. COMPOUND $\frac{\text{Peak Area} \cdot \text{Concentration of I.S.}}{\text{Peak Area of I}}$
679			99968	46720	21409
1045			13968	46720	3009
1235	styrene ~~ethylbenzene~~	1	10016	46720	2109
1350			2280	46720	509
1409	Benzaldehyde	1	7432	46720	1609
1472	Benzonitrile	1	11872	46720	2509
1567	C-allylstyrene ~~styrene~~	3	25856	46720	5509
1715			11568	46720	2509
1759	naphthalene ~~C₁₀H₈ aromatic~~	1	27808	46720	6009
1580	C ₁₀ H ₁₂ ~~allylstyrene~~ ~~styrene~~	2	13136	46720	2809

Calculations by LC

(Run 02 - Ia - FB)

SCM NUMBER	COMPOUND IDENTIFICATION	ID 17273	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND PCA _{test} - Concentration of I.S. Aut. test - PCA _{IS} . 1
1591	acetylphenol	1	9040	46720	19 ng
1528	acetophenone	3			
1529	acetophenone	3			
1530	acetophenone	3			
1531	acetophenone	3			
1532	acetophenone	3			
1533	acetophenone	3			
1534	acetophenone	3			
1535	acetophenone	3			
1536	acetophenone	3			
1537	acetophenone	3			
1538	acetophenone	3			
1539	acetophenone	3			
1540	acetophenone	3			
1541	acetophenone	3			
1542	acetophenone	3			
1543	acetophenone	3			
1544	acetophenone	3			
1545	acetophenone	3			
1546	acetophenone	3			
1547	acetophenone	3			
1548	acetophenone	3			
1549	acetophenone	3			
1550	acetophenone	3			
1551	acetophenone	3			
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1561	acetophenone	3			
1562	acetophenone	3			
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1565	acetophenone	3			
1566	acetophenone	3			
1567	acetophenone	3			
1568	acetophenone	3			
1569	acetophenone	3			
1570	acetophenone	3			
1571	acetophenone	3			
1572	acetophenone	3			
1573	acetophenone	3			
1574	acetophenone	3			
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1576	acetophenone	3			
1577	acetophenone	3			
1578	acetophenone	3			
1579	acetophenone	3			
1580	acetophenone	3			
1581	acetophenone	3			
1582	acetophenone	3			
1583	acetophenone	3			
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1585	acetophenone	3			
1586	acetophenone	3			
1587	acetophenone	3			
1588	acetophenone	3			
1589	acetophenone	3			
1590	acetophenone	3			
1591	acetophenone	3			
1592	acetophenone	3			
1593	acetophenone	3			
1594	acetophenone	3			
1595	acetophenone	3			
1596	acetophenone	3			
1597	acetophenone	3			
1598	acetophenone	3			
1599	acetophenone	3			
1600	acetophenone	3			

Sample Identification 5AAD809

Calculations By LC

(Run 03 - Out - A)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17273	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND $\frac{\text{Peak Area} \cdot \text{Concentration of I.S.}}{\text{Peak Area of I.S.}}$
993	unknown	3	342528	98048	349 ng
1184	XYLENE	1	300032	98048	306 ng
1351	trimethyl benzene	1	233984	98048	239 ng
1506	1,2-dichlorobenzene	1	189184	98048	193 ng
1570	1,2-dichlorobenzene	2	203008	98048	207 ng
1236	styrene	2	276992	98048	283 ng
C-96					

Calculations by

(Run 03 - Out - B)

GCMS NUMBER	SUBSTANCE IDENTIFICATION	ID DZ73	RIC PEAK AREA OF WMT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF WMT. COMPOUND WMT. CONCENTRATION OF I.S. $\frac{\text{RWC}_{\text{wmt}}}{\text{RWC}_{\text{i.s.}}} \times 100 = \%$
1183	Xylene	1	296448	103040	290 ns
1234	Xylene, styrene	1	247552		240 ns
1349	Benzene ethyl benzene	2	172288		170 ns
1457	dichlorobenzene + chlorobenzene	1+3	311808		300 ns
1507	isobutylene dichlorobenzene +	1	210944	↓	200 ns
C-97					

BRADIAN

Calculations by B

(Lab. Blank)

[illegible]

C-98

Sample Identification SATD839

(Run 03-In-FB) (Field Blank)

Calculations By TD

GC#	COMPONENT IDENTIFICATION	ID D273	RIG PEAK AREA OF TEST. COMPOUND	RIG PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND $\frac{\text{Peak Area} \cdot \text{Concentration of I.S.}}{\text{Peak Area} \cdot 1}$
1235	<i>styrene</i>	3	142592	37184	380ng
1326	<i>methylstyrene</i> <i>C₁₀H₈ benzene</i>	2	7448	37184	20ng
1392	<i>methylstyrene</i> <i>C₁₀H₈ benzene</i>	2	5632		15ng
1410	Benzaldehyde	1	5854		16ng
1509	<i>C₂-alkylstyrene</i> <i>C₁₂H₁₂ styrene</i>	2	258560		700ng
1582	<i>C₂-alkylstyrene</i> <i>C₁₂H₁₂ styrene</i>	2	211456		570ng
1626	<i>divinylbenzene</i> <i>C₁₀H₈ benzene</i>	2	41088		110ng
1644	<i>divinylbenzene</i> <i>C₁₀H₈ benzene</i>	2	23680		60ng
C-99					

BRADMAN

Calculations By B

(Run 03-In-A)

C-100

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

Sample Identification SAA084C Calculations by B

(Run 03-IN-13)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID	RAC PEAK AREA OF TENT. COMPOUND	RAC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TENT. COMPOUND $\frac{\text{RAC}_{\text{tent}} \cdot \text{Concentration of I.S.}}{\text{RAC}_{\text{IS}} \cdot 1}$
402	~~CH₃I, 50~~ ~~toluene~~	3	137168	53446	250ns
1181	~~CH₃ Xylene~~	1	289280		540ns
1233	~~styrene~~	1	193536		360ns
1454	~~C₉-ethylbenzene +~~ ~~styrene~~	1	294400		550ns
1348	~~C₉-ethylbenzene~~ ~~C₁₀H₈ Superbugle~~ ~~1-methylcyclohexene~~	1	204032		380ns
1547	~~C₁₀-ethylbenzene~~ ~~C₁₁H₁₄ Superbugle~~	2	205824		390ns
C-101					

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

Sample Identification 5AAD842

Calculations by B

(Run 03-IN-C)

RT	COMPOUND IDENTIFICATION	10 273	DOC PEAK AREA OF TEST. COMPOUND	DOC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND PURITY - Concentration of (g/L) Ref. test: $\frac{P_{A_{std}}}{P_{A_{int}}} \times 1$
297	C5H6		108286	62848	170ns
400	acetaldehyde		198912		320ns
1568	C2-allylbenzene	2	149760		240ns
643	nitromethane	1	218112		350ns
392	benzene	1	111744		180ns
294	Diethylbenzene	2	102400		160ns
398	acetaldehyde, 50% 10% PS	3	174080		280ns

C-102

RADIUM

Calculations by $\mathbb{P}$

(Pun 03-In-D)

[illegible]

C-103

RADIAN

Calculations by R

(Run 03-Out-FB) (Field Blank)

[illegible]

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

Sample Identification 5AAD845

Calculations By B

(Run 03-Out-C)

NAME	COMPOUND IDENTIFICATION	ID	RAG PEAK AREA OF TEST. COMPOUND	RAG PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND Peak = Concentration of I.S. Std. $\times \frac{RAG_{test}}{RAG_{std}}$
1182	Xylene	1	288766	48832	590ns
1232	Xylene	1	232704		480ns
1201 1349	~~Cy-ethylbenzene~~ ~~Cy-ethylbenzene~~	2	219040		440ns
1455	~~Cy-ethylbenzene~~ ~~Cy-ethylbenzene~~	2	299520		600ns
1455	dichlorobenzene	1	299520		
1504	dichlorobenzene	1	159284		340 ns
C-105					

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

Sample Identification SAAD 8-16

Calculations by B

(Run 03-Out-D)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID	RIG PEAK AREA OF TENT. COMPOUND	RIG PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TENT. COMPOUND $\frac{\text{Peak Area} \cdot \text{Concentration of I.S.}}{\text{Peak Area} \cdot 1}$
402	acetone, ~~butanone~~	3	164352	78848	210 ns
1183	Xylene	1	286720		360 ns
1456	~~2,4-dichlorobenzene~~ ~~styrene~~	2	302592		380 ns
1232	Xylene	1	244992		310 ns
1505	~~isobutylene~~ dichlorobenzene +	1	162560		210 ns
C-106					

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

Sample Identification 5AAD847

Calculations By B

(Run 04 - Out - FB) (Field Blank)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND $\frac{\text{Peak Area} \cdot \text{Concentration of I.S. Std.}}{\text{Peak Area} \cdot 1}$
304	~~pentane~~ ~~C₅H₁₂ hydrocarbon~~	2	58432	40064	150ng
1234	~~styrene~~ ~~C₈H₈ aromatic~~	2	50368		130ng
1567	~~C₂-alkylstyrene~~ ~~C₁₀H₁₂ aromatic~~	2	143104		360ng
1625	~~divinylbenzene~~ ~~C₁₀H₈ aromatic~~	2	8608		20ng
1581	~~C₂-alkylstyrene~~ ~~C₁₀H₁₂ aromatic~~	2	67584		170ng
1689	~~C₂-alkylstyrene~~ ~~C₁₀H₁₂ aromatic~~	2	9072		20ng
C-107					

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

Sample Identification SAAD848

(Run 04 - Out - D)

Calculations By B

SCAN NUMBER	COMPOUND IDENTIFICATION	ID	SIG PEAK AREA OF TENT. COMPOUND	SIG PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TENT. COMPOUND $\frac{\text{Peak Area} \cdot \text{Concentration of I.S.}}{\text{Area}_{\text{I.S.}}}$
1194	~~C₉H₈ + aromatic~~ ~~hydrocarbon~~	2	520704	92416	560 ns
1209	~~dichlorobenzene~~ ~~C₆H₄Cl₂~~	3	116608		130 ns
1367	~~C₁₀H₂₀~~ ~~decahydronaphthalene~~	3	212480		230 ns
1525	~~C₉H₈~~ ~~antimony~~	3	457216		490 ns
1314	~~C₁₀H₁₆~~ ~~undecane~~	3	252416		270 ns
C-108					

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

Sample Identification SAD 849 Calculations by B

(Run 04 - Aut-A)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID NO	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND $\text{Amt. test.} = \frac{\text{RIC}_{\text{test}}}{\text{RIC}_{\text{std}}} \times \text{Concentration of I.S.}$
396	~~CH₃I, dimethyl ether~~ ~~unknown~~ C ₅ H ₈	1273	186368	64896	290ns
1452	dichloro benzene	1	226816		350ns
1346	unknown	3	154368		240ns
1500	dichloro benzene	1	177408		270ns
1319	C ₁₀ H ₆ camphene	2	104320		160ns
1489	dichlorobenzene Benofuran +	2	220672		340ns
C-109					

RADIAN

Calculations by B

(Run Of - Out - B)

[illegible]

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

Sample Identification SAAD 851

(Run 04 - Out - C)

Calculations by B

SCAN NUMBER	COMPOUND IDENTIFICATION	ID	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TENT. COMPOUND $\frac{R_{A_{tent}}}{R_{A_{std}}} \cdot \text{Concentration of I.S.}$
1504	dichlorobenzene	1	153854	98304	160 ns
1568	~~2-allylphenol~~ ~~2-allylphenol~~		305152		310 ns
1235	~~styrene~~ ~~styrene~~	3	312320		320 ns
1353	unknown aromatic	3	109054		110 ns
1455	dichlorobenzene	1	188160		190 ns
C-111					

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

Sample Identification 5AAD859

Calculations by B

(Run 05 - In - FB) (Field Blank)

GCMS NUMBER	COMPOUND IDENTIFICATION	IO 273	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND PURITY - Concentration of I.S. Std. tests $\frac{\text{Peak}}{\text{Peak}} = 1$
211	Unknown		4192	9088	46ns
235	Alkyne		705		10ns
4351	Unknown	3	229		3.0ns
1411	C ₈ -alkylbenzene Benzaldehyde	2	190		5.1ns
1570	C ₂ -alkylbenzene	2	1446		16ns
1581	C ₂ -alkylbenzene	3	639		7.0ns
C-112					

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

Sample Identification 5AAD866

(Run 05-In-A)

Calculations By B

SCAN NUMBER	COMPOUND IDENTIFICATION	ID #	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND $\frac{\text{Peak Area} \cdot \text{Concentration of I.S.}}{\text{Peak Area} \cdot 1}$
211	~~C₁₀H₈O~~ unknown	3	103424	49536	210ns
402	~~acetone, SO₂, C₂H₆~~ unknown	3	143614		290ns
616	Unknown aromatic	3	103808		210ns
1442	~~benzophenone~~ Unknown aromatic	3	353280		710ns
1052	Unknown aromatic	3	237566		480ns
11604	Unknown aromatic	3	159488		320ns

C-113

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN
ANALYTICAL

Sample Identification 5AAD861

(Run 05-IN-B)

Calculations By B

SCAN NUMBER	COMPOUND IDENTIFICATION	ID	DIG PEAK AREA OF TENT. COMPOUND	DIG PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TENT. COMPOUND $\frac{\text{Peak Area} \cdot \text{Concentration of I.S.}}{\text{Peak Area} \cdot 1}$
348	Furan	1	190208	21696	880ns
395	acetone, 3-hydroxybutanone	3	223488		1000ns
1347	Unknown, aromatic	3	29920		140ns
1439	benzofuran + dichlorobenzene	3	284672		1300ns
1452	C ₁₁ -alkylbenzene dichlorobenzene +	1	122112		560ns
1501	toluene dichlorobenzene +	1	71096		330ns
C-114					

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

Sample Identification SAAD862

(Run 05-In-C)

Calculations by P

COMP. NO.	COMPOUND IDENTIFICATION	ID NO.	NET PEAK AREA OF TEST. COMPOUND	NET PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND PMA _{test} = Concentration of I.S. Std. tests PMA _{is} × 1
407	5031 [REDACTED]	12	236544	33984	700ns
519	CyH ₂ [REDACTED]	12	130816		380ns
1181	[REDACTED]	1	937408		990ns
1407	Cy-alkylbenzene Benzaldehyde &	1	207616		610ns
1442	benzofuran + [REDACTED]	3	367616		1100ns
1453	Cy-alkylbenzene dichlorobenzene +	1	270848		800ns
1471	benzofuran [REDACTED]	2	324656		960ns
C-115	[REDACTED]				

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN
ANALYTICAL

Sample Identification 5AAD863
(Run 05-IN-D)

Calculations by R

SCAN NUMBER	COMPOUND IDENTIFICATION	ID #	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND $\frac{\text{RIC}_{\text{test}}}{\text{RIC}_{\text{std}}} \times \text{Concentration of I.S. Std.}$
149	~~C₈H₆~~ ~~benzene~~	2	126848	24384	520ns
394	~~acetone, 50%~~ ~~acetone~~	1	104448		430ns
1408	Benzaldehyde	1	107244		440ns
1442	Benzofuran	2	69248		280ns
1472	~~benzophenone~~ ~~benzophenone~~	1	301056		1200ns
C-116					

RADIAN

Calculations By RA

(Lab Blank)

GCMS NUMBER	COMPOUND IDENTIFICATION	ID	RIC PEAK AREA OF TEST. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND PMA _{test} = Concentration of I.S. x PMA _{std} / PMA _{std} . 1 in total ng
1604	Unknown	3	1036	8704	12 11.9
C-117					
1730					
1731					
1732					
1733					

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

Sample Identification 5AAD 868
(Run 05 - Out - D)

Calculations by DE

SCAN NUMBER	COMPOUND IDENTIFICATION	ID	RIC PEAK AREA OF TENT. COMPOUND	RIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TENT. COMPOUND PMA _{tent} = Concentration of I.S. Std. x PMA _{tent} / PMA _{I.S.} in total ng
308	hydrocarbon C ₁₀ H ₁₈	2	124032	9536	1300
1322	C ₁₀ H ₁₆ hydrocarbon	2	181766		1910
1441	benzofuran + unidentified aromatic dichlorobenzene	2	305664		3210
1455	C ₉ -alkylbenzene dichlorobenzene +	1	267264		2800
1505	dichlorobenzene	1	292864		3070
C-118					

BRADIAN

Calculations by PD

(Run 05 - Out ÷ B)

QAM	QAM IDENTIFICATION	ID	QAM PEAK AREA OF TEST. COMPOUND	QAM PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND PLA _{test} - Concentration of I, B Ant. test - <u>PLA_{IS} . 1</u> in total ng
1322	Sw H ₂ hydrocarbon	3	204800	15424	1330
1441	benzofuran	3	215552		1400
1454	2-allylbenzene	1	278528		1810
1503	1-chlorobenzene	1	263168		1710
C-120	1,2-dichlorobenzene				
1535	1,3-dichlorobenzene				
	1,4-dichlorobenzene				
	1,2,3-trichlorobenzene				
	1,2,4-trichlorobenzene				
	1,3,5-trichlorobenzene				
	1,2,3,4-tetrachlorobenzene				
	1,2,3,5-tetrachlorobenzene				
	1,2,3,6-tetrachlorobenzene				
	1,2,4,5-tetrachlorobenzene				
	1,2,3,4,5-pentachlorobenzene				
	1,2,3,4,6-pentachlorobenzene				
	1,2,3,5,6-pentachlorobenzene				
	1,2,3,4,5,6-hexachlorobenzene				

Sample Identification SPAD 871

(Run 05-Oct-81)

Calculations by FB

SCN NUMBER	CONTAMINANT IDENTIFICATION	ID D273	NET PEAK AREA OF REF. COMPOUND	NET PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF REF. COMPOUND MULTIPLY BY CONCENTRATION OF I.S. in total ng
398	acetone, 50% unknown hydrocarbon	2	198144	17888	1110
1442	Benzobenzene + ~~styrene~~	1	221440		1240
1455	dichlorobenzene	1	270336		1510
1503	dichlorobenzene	1	212480	↓	1190

Sample Identification 5AHD873

(Run 04-IR-A)

Collection By PO

COMPOUND NUMBER	COMPOUND IDENTIFICATION	ID D273	NET PEAK AREA OF TMT. COMPOUND	NET PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TMT. COMPOUND mg/L - Concentration of 1,4- methylbenzene in total air
395	~~63, 50, 1, 4~~ ~~methylbenzene~~	~~2~~	193792	11248	1720
1412	~~benzofuran~~	~~2~~	299008		2660
1234	~~styrene~~	2	209312		2390
1454	~~Di-ethylbenzene~~ dichlorobenzene	1	102016	↓	907

(Run 04-In-B)

Calculations by FE

C-123

Calculations by FD

C-124

Sample Identification 5AAD876

(Run 06 - Out - FB) (Full Blend)

Calculations by FD

SCAN NUMBER	COMPONENT IDENTIFICATION	ID 17273	NET PEAK AREA OF TENT. COMPONENT	NET PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TENT. COMPONENT $\frac{\text{Peak}_{\text{tent}} \cdot \text{Concentration of I.S.}}{\text{Peak}_{\text{std}} \cdot 1}$ in total ng
211	Unknown	3	92800	36672	253
696	Unknown	3	259840		709
1409	Unknown aromatic	3	546840		1490

Sample Identification 5NAD873

(Run 06-Oct-87)

Calculations by RD

SCAN NUMBER	COMPOUND IDENTIFICATION	ID D273	NET PEAK AREA OF REF. COMPOUND	NET PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF REF. COMPOUND $\frac{\text{Peak Area} \cdot \text{Concentration of I.S.}}{\text{Peak Area} \cdot 1}$ in total ng
398	<i>CS₂, SO₂</i> <i>butanone</i>	3	279552	15120	1850
687	<i>butanone</i>	3	192256		1270
1453	<i>p-allylbenzene</i> <i>dichlorobenzene +</i>	1	305664		2020
1502	<i>isobutylene</i> <i>dichlorobenzene</i>	1	266752	↙	1760

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

RADIAN

Sample Identification 5AAD878
(Run 04-Inv-D)

Calculations By TD

SCAN NUMBER	COMPOUND IDENTIFICATION	ID D273	NIC PEAK AREA OF TEST. COMPOUND	NIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND mg/L = $\frac{\text{Peak Area} \cdot \text{Concentration of I.S.}}{\text{Peak Area} \cdot 1}$ in total mg
1292	<i>cyclopentane</i> <i>dinitrofluorobenzene</i>	1	189187	403200	469
346	furcan	1	189696		470
395	<i>OS₂, SO₂</i> <i>unknown</i>	3	162560		403
529	hexene	1	235520		584
682	unknown	3	233472		579
1253	<i>C₁₀H₆</i>	2	291328		723
1308	<i>C₁₀H₆</i>	2	280576	↙	696

Sample Identification 5AHD879

(Run 06-Oct-8)

Calculations by TR

Sample Number	Compound Name	ID D273	NET PEAK AREA OF TEST. COMPOUND	NET PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TEST. COMPOUND Present - Concentration of I.S. Reference - in total ng
306	C ₄ H ₈ O	2	172032	19530	881
683	Chloroform + unknown +	3	227584		1170
1452	C ₄ -alkylbenzene dichlorobenzene +	1	296448		1530
1501	dichlorobenzene	1	219392		1120
1602	unknown	3	302592	↑	1550

Sample Identification 5AAD884

(Lab Blank)

Calculations by ②

NO.	COMPOUND IDENTIFICATION	ID	AUC PEAK AREA OF EXT. CORPUS	AUC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF EXT. CORPUS PURITY - Concentration of 1.0 in total ng
1567	<i>Diethylstilbestrol</i>	10 D273	2192	6888	31.9
1568	<i>Diethylstilbestrol</i>	10 D273	19168	6888	27.8
1569	<i>Diethylstilbestrol</i>	10 D273			
1570	<i>Diethylstilbestrol</i>	10 D273			
1571	<i>Diethylstilbestrol</i>	10 D273			
1572	<i>Diethylstilbestrol</i>	10 D273			
1573	<i>Diethylstilbestrol</i>	10 D273			
1574	<i>Diethylstilbestrol</i>	10 D273			
1575	<i>Diethylstilbestrol</i>	10 D273			
1576	<i>Diethylstilbestrol</i>	10 D273			
1577	<i>Diethylstilbestrol</i>	10 D273			
1578	<i>Diethylstilbestrol</i>	10 D273			
1579	<i>Diethylstilbestrol</i>	10 D273			
1580	<i>Diethylstilbestrol</i>	10 D273			
1581	<i>Diethylstilbestrol</i>	10 D273			
1582	<i>Diethylstilbestrol</i>	10 D273			
1583	<i>Diethylstilbestrol</i>	10 D273			
1584	<i>Diethylstilbestrol</i>	10 D273			
1585	<i>Diethylstilbestrol</i>	10 D273			
1586	<i>Diethylstilbestrol</i>	10 D273			
1587	<i>Diethylstilbestrol</i>	10 D273			
1588	<i>Diethylstilbestrol</i>	10 D273			
1589	<i>Diethylstilbestrol</i>	10 D273			
1590	<i>Diethylstilbestrol</i>	10 D273			
1591	<i>Diethylstilbestrol</i>	10 D273			
1592	<i>Diethylstilbestrol</i>	10 D273			
1593	<i>Diethylstilbestrol</i>	10 D273			
1594	<i>Diethylstilbestrol</i>	10 D273			
1595	<i>Diethylstilbestrol</i>	10 D273			
1596	<i>Diethylstilbestrol</i>	10 D273			
1597	<i>Diethylstilbestrol</i>	10 D273			
1598	<i>Diethylstilbestrol</i>	10 D273			
1599	<i>Diethylstilbestrol</i>	10 D273			
1600	<i>Diethylstilbestrol</i>	10 D273			

5217 0887-

(Field Blank)

Calculus of Ions by

C-130

5771) 888

Field Blank

C-131

Sample Identification 5A9D889

Calculations By PD

(Run 06-IR-A)

SCAN NUMBER	COMPOUND IDENTIFICATION	ID 17273	NET PEAK AREA OF EXT. COMPOUND	NET PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF EXT. COMPOUND $\frac{PA_{ext} \cdot \text{Concentration of I.S.}}{PA_{I.S.} \cdot 1}$ in total ng
214	~~Phenanthrene~~ <i>Phenanthrene</i>	2	359936	789740	456
403	~~CH₃I, SO₂, C₆H₆~~ <i>Unknown Aromatic</i>	2	181248		229
714	Unknown aromatic	3	73854		93.5
1112	Unknown	3	315392	↑	399

Sample Identification 5A9D890

Calculations By PD

1 Run 06-In-B

SCM NUMBER	CORRECTION IDENTIFICATION	ID D273	NET PEAK AREA OF TENT. CORRECTION	NET PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF TENT. CORRECTION Subst. - Concentration of I.S. Avg. tent. - PMAg. - 1 in total ng
214	~~Phenanthrene~~ ~~anthracene~~ ~~fluoranthene~~ CH ₃ I, SO ₂ , 4,4'-DDT	3	106880	19168	558
400	~~anthracene~~ CS ₂	3	201472		1050
618	~~anthracene~~ ~~anthracene~~ ~~anthracene~~ anthracene	3	118528		618
684	thiophene anthracene	3	684		3.57
1455	1,4-dichlorobenzene	1	175872	↓	918

Sample Identification 5AAD891

(Run 06-In-C)

Calculations by TD

Peak Number	Compound Name	ID D73	NO. PEAK AREA OF REF. COMPOUND	NO. PEAK AREA OF UNKNOWN STD.	ESTIMATE AMOUNT OF REF. COMPOUND mg./g. = $\frac{\text{Peak Area of Ref. Compound}}{\text{Peak Area of Unknown Std.}} \times \text{Concentration of I.S. in total ng}$
698	unknown	3	203008	74752	222
708	unknown	3	104704		140
1111	unknown hydrocarbon	3	313344		419
1450	Caraldehyde dichloro compound	1	259328		342

Sample Identification Run 6/out-c, SAC-259 (38A)
SAND 899

Calculations by _____

SCAN NUMBER	COMPOUND IDENTIFICATION	ID D273	AIC PEAK AREA OF REF. COMPOUND	AIC PEAK AREA OF INTERNAL STD.	ESTIMATE AMOUNT OF REF. COMPOUND MULTIPLY - Concentration of I.S. REF. - 1 IN total ng
213	Unknown	3	193056	11920	1450
306	C5 H12	2	162044	11920	1360
1454	Dichlorobenzene + Cy-alphabenzene	1	303104	11920	2540
1503	Dichlorobenzene	1	201916	11920	1690

No.	Date	Particulars	Debit	Credit	Balance	Total	Total	Total	Total	Total
1	1/1/19	Balance b/d								
2	1/1/19	By Cash								
3	1/1/19	To Cash								
4	1/1/19	By Cash								
5	1/1/19	To Cash								
6	1/1/19	By Cash								
7	1/1/19	To Cash								
8	1/1/19	By Cash								
9	1/1/19	To Cash								
10	1/1/19	By Cash								
11	1/1/19	To Cash								
12	1/1/19	By Cash								
13	1/1/19	To Cash								
14	1/1/19	By Cash								
15	1/1/19	To Cash								
16	1/1/19	By Cash								
17	1/1/19	To Cash								
18	1/1/19	By Cash								
19	1/1/19	To Cash								
20	1/1/19	By Cash								
21	1/1/19	To Cash								
22	1/1/19	By Cash								
23	1/1/19	To Cash								
24	1/1/19	By Cash								
25	1/1/19	To Cash								
26	1/1/19	By Cash								
27	1/1/19	To Cash								
28	1/1/19	By Cash								
29	1/1/19	To Cash								
30	1/1/19	By Cash								
31	1/1/19	To Cash								
32	1/1/19	By Cash								
33	1/1/19	To Cash								
34	1/1/19	By Cash								
35	1/1/19	To Cash								
36	1/1/19	By Cash								
37	1/1/19	To Cash								
38	1/1/19	By Cash								
39	1/1/19	To Cash								
40	1/1/19	By Cash								
41	1/1/19	To Cash								
42	1/1/19	By Cash								
43	1/1/19	To Cash								
44	1/1/19	By Cash								
45	1/1/19	To Cash								
46	1/1/19	By Cash								
47	1/1/19	To Cash								
48	1/1/19	By Cash								
49	1/1/19	To Cash								
50	1/1/19	By Cash								
51	1/1/19	To Cash								
52	1/1/19	By Cash								
53	1/1/19	To Cash								
54	1/1/19	By Cash								
55	1/1/19	To Cash								
56	1/1/19	By Cash								
57	1/1/19	To Cash								
58	1/1/19	By Cash								
59	1/1/19	To Cash								
60	1/1/19	By Cash								
61	1/1/19	To Cash								
62	1/1/19	By Cash								
63	1/1/19	To Cash								
64	1/1/19	By Cash								
65	1/1/19	To Cash								
66	1/1/19	By Cash								
67	1/1/19	To Cash								
68	1/1/19	By Cash								
69	1/1/19	To Cash								
70	1/1/19	By Cash								
71	1/1/19	To Cash								
72	1/1/19	By Cash								
73	1/1/19	To Cash								
74	1/1/19	By Cash								
75	1/1/19	To Cash								
76	1/1/19	By Cash								
77	1/1/19	To Cash								
78	1/1/19	By Cash								
79	1/1/19	To Cash								
80	1/1/19	By Cash								
81	1/1/19	To Cash								
82	1/1/19	By Cash								
83	1/1/19	To Cash								
84	1/1/19	By Cash								
85	1/1/19	To Cash								
86	1/1/19	By Cash								
87	1/1/19	To Cash								
88	1/1/19	By Cash								
89	1/1/19	To Cash								
90	1/1/19	By Cash								
91	1/1/19	To Cash								
92	1/1/19	By Cash								
93	1/1/19	To Cash								
94	1/1/19	By Cash								
95	1/1/19	To Cash								
96	1/1/19	By Cash								
97	1/1/19	To Cash								
98	1/1/19	By Cash								
99	1/1/19	To Cash								
100	1/1/19	By Cash								

APPENDIX D
CEM DATA/ONE MINUTE AVERAGES

SEWAGE SLUDGE - JACKSONVILLE. FL DAY 1 04-30-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
14:22:12	12.0	742.2	6.7	482.3	172.4	28.2
14:23:15	12.2	733.0	6.5	463.3	172.4	32.4
14:24:19	12.7	670.5	6.3	416.5	161.2	33.3
14:25:23	12.7	725.2	6.3	407.8	158.1	34.1
14:26:27	12.7	679.0	6.3	413.2	157.3	34.3
14:27:30	12.7	747.8	6.3	416.1	159.1	34.3
14:28:34	12.5	773.5	6.5	427.5	158.7	35.3
14:29:38	12.2	837.0	6.6	445.6	164.1	36.3
14:30:42	12.2	825.7	6.6	454.4	163.1	37.4
14:31:46	12.7	653.8	6.3	419.4	157.3	36.3
14:32:50	12.7	695.4	6.4	414.2	157.9	33.1
14:33:54	12.4	845.4	6.6	434.4	163.3	26.4
14:34:58	12.3	967.9	6.6	459.9	168.3	26.4
14:36:02	12.6	768.8	6.5	432.2	162.1	45.4
14:37:07	12.7	741.2	6.3	419.6	162.8	50.5
14:38:11	12.7	730.9	6.3	410.2	162.7	58.8
14:39:15	12.7	721.7	6.2	398.5	158.3	62.7
14:40:19	12.7	757.7	6.3	402.4	160.5	63.7
14:41:23	12.7	886.9	6.4	425.3	164.4	64.7
14:42:28	12.5	1029.2	6.5	442.9	171.2	66.7
14:43:32	12.1	1168.0	6.7	476.3	180.1	67.7
14:44:36	11.8	1316.3	6.9	508.8	188.4	69.6
14:45:40	11.7	1325.9	7.0	524.9	195.4	71.7
14:46:45	9.6	1277.1	8.9	588.2	224.8	72.6
14:47:49	9.4	1579.9	8.9	615.7	249.1	71.6
14:48:53	9.4	1579.2	8.9	631.1	249.6	67.5
14:49:57	9.4	1430.8	8.9	612.5	243.1	66.4
14:51:01	9.0	1864.4	9.1	656.3	270.5	63.3
14:52:05						
14:53:09						
14:54:13	8.9	2066.8	9.2	588.8	214.9	59.1
14:55:18	8.6	2205.0	9.5	676.0	248.7	62.1
14:56:21	8.8	1883.5	9.4	684.7	252.8	63.1
14:57:25	8.9	1657.4	9.3	658.7	250.1	41.8
14:58:29	9.1	1438.3	9.2	628.8	246.0	58.9
14:59:33	9.4	1222.7	9.0	602.1	233.5	52.8
15:00:37	9.2	1339.4	9.1	607.3	242.3	31.6
15:01:41	8.8	1541.7	9.4	658.3	251.0	30.6
15:02:45	8.7	1345.7	9.4	657.0	241.3	27.5
15:03:48	8.8	1577.6	9.4	664.7	258.6	28.5
15:04:52	8.6	1723.6	9.4	684.1	271.9	35.6
15:05:56	9.0	1312.1	9.3	648.0	248.3	32.5
15:07:00	9.4	1081.3	9.0	598.1	235.4	31.5
15:08:05	9.3	1007.4	9.1	593.8	226.7	30.5
15:09:09	8.9	1320.3	9.3	635.0	245.0	27.4
15:10:14	9.0	1233.7	9.2	637.6	237.2	26.4
15:11:18	9.2	1097.6	9.1	613.0	231.9	25.4
15:12:22	9.2	1100.0	9.1	610.0	232.4	24.4
15:13:26	9.3	1128.3	9.0	607.9	234.5	25.4
15:14:31	9.2	1082.3	9.1	613.0	234.9	27.3
15:15:35	8.8	1188.8	9.4	644.7	242.4	32.3

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 1 04-30-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
15:16:39	8.8	1171.4	9.3	652.5	239.7	31.3
15:17:43	9.4	987.5	9.0	608.7	233.7	28.2
15:18:47	9.5	1012.6	8.8	587.9	237.5	27.2
15:19:51	9.4	1126.5	9.0	602.1	239.4	26.3
15:20:55	9.0	1316.1	9.2	630.8	256.3	24.2
15:22:00	9.2	1190.9	9.1	623.3	239.4	24.2
15:23:04	9.0	1169.6	9.2	619.9	235.8	28.2
15:24:08	8.9	1226.9	9.3	641.0	242.3	29.2
15:25:12	8.9	1126.1	9.3	634.8	237.4	25.2
15:26:16	8.9	1156.5	9.3	643.1	244.8	24.2
15:27:21	9.1	1066.0	9.1	619.0	238.5	25.2
15:28:25	9.3	1030.2	9.0	599.5	238.8	24.1
15:29:29	9.0	1150.9	9.2	622.3	245.9	17.1
15:30:34						
15:31:38						
15:32:42						
15:33:46	8.9	1237.2	9.3	539.1	184.1	16.1
15:34:50	8.6	1254.9	9.4	641.4	203.9	16.1
15:35:55	8.5	1064.8	9.6	663.8	213.6	16.1
15:36:59	8.5	1030.8	9.5	668.0	222.9	16.1
15:38:03	8.8	961.1	9.4	648.6	224.6	15.1
15:39:07	8.6	926.4	9.5	648.1	225.8	15.1
15:40:12	9.1	846.8	9.2	626.2	223.1	15.1
15:41:16	9.7	653.5	8.7	555.5	219.2	15.1
15:42:20	9.9	664.1	8.6	528.0	219.3	16.2
15:43:24	9.5	737.3	8.9	558.6	217.7	16.1
15:44:28	9.3	843.5	9.0	587.9	220.0	16.1
15:45:32	9.3	789.0	9.0	588.2	220.0	16.0
15:46:36	9.2	716.7	9.1	589.8	217.2	18.5
15:47:40	9.1	791.8	9.2	606.8	219.1	47.5
15:48:45	9.1	818.3	9.2	609.5	221.9	20.9
15:49:49	9.2	820.4	9.1	604.5	224.0	26.8
15:50:54	9.4	829.6	9.0	598.9	225.6	33.6
15:51:59	9.4	797.7	8.9	592.4	222.5	21.8
15:53:03	9.5	814.3	8.9	578.8	222.3	19.9
15:54:08	9.5	829.5	8.8	577.4	223.7	
15:55:12	9.2	971.5	9.0	609.4	235.8	
15:56:17	8.7	1256.6	9.3	661.4	251.1	
15:57:21	8.8	1178.0	9.3	657.4	252.9	
15:58:25	9.4	1086.5	9.2	633.0	245.4	
15:59:29	9.3	1030.5	9.3	657.7	254.9	21.7
16:00:33	9.2	1030.5	8.2	630.1	225.4	23.7
=====						
POINTS	88	88	88	88	88	83
MEAN	10.0	1086.2	8.4	573.4	217.1	35.2
STD. DEV.	1.5	331.2	1.2	86.6	33.4	17.2

SEWAGE SLUDGE - JACKSONVILLE. FL DAY 1 04-30-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
A	B	C	D	E	F	
16:04:22						
16:05:25						
16:06:28						25.6
16:07:31	8.9	1013.8	9.0	576.9	197.4	24.6
16:08:35	8.9	1022.0	9.0	606.6	214.4	24.6
16:09:38	9.0	1028.7	9.0	609.7	223.3	24.2
16:10:42	8.6	1254.7	9.3	636.1	239.4	23.6
16:11:46	8.4	1262.9	9.4	659.9	245.6	23.6
16:12:49	8.7	1036.4	9.3	630.1	235.2	22.6
16:13:53	8.7	918.4	9.2	614.7	226.7	21.6
16:14:56	9.0	834.1	9.1	595.3	223.1	21.6
16:16:00	8.8	910.6	9.2	602.7	229.3	20.6
16:17:03	8.7	946.0	9.3	622.8	231.3	20.6
16:18:07	8.7	938.2	9.3	623.8	231.9	20.6
16:19:11	8.7	859.5	9.3	617.6	228.0	20.6
16:20:15	8.9	782.2	9.2	600.4	223.3	20.6
16:21:19	9.0	812.3	9.1	593.1	225.5	19.6
16:22:22	9.1	800.6	9.0	583.2	224.4	18.6
16:23:26	9.1	832.8	9.0	588.4	226.7	18.6
16:24:29	8.8	901.9	9.2	604.1	229.2	16.6
16:25:33	8.8	895.9	9.2	612.5	231.0	12.7
16:26:36	8.5	992.3	9.4	634.8	240.4	11.8
16:27:40	8.2	1008.2	9.6	667.7	243.0	11.7
16:28:44	8.0	1071.4	9.7	690.2	252.1	11.7
16:29:48	8.2	846.5	9.6	669.7	237.9	12.7
16:30:51						
16:31:55						
16:32:59						
16:34:03						
16:35:07	9.7	647.1	8.4	480.4	189.6	18.4
16:36:11	9.6	679.0	8.5	507.6	193.5	17.4
16:37:14	9.4	745.0	8.5	537.7	202.4	16.5
16:38:18	9.5	693.2	8.6	536.7	204.7	16.4
16:39:22	9.3	772.9	8.8	548.4	210.3	16.4
16:40:25	8.9	839.1	8.9	571.6	214.5	16.4
16:41:29	8.7	896.4	9.2	599.8	217.3	15.5
16:42:33	8.6	829.2	9.2	607.3	217.2	13.6
16:43:37	8.5	850.1	9.3	614.1	222.3	14.5
16:44:41	8.5	839.3	9.3	623.1	223.4	14.5
16:45:45	8.7	819.9	9.1	607.7	224.0	13.5
16:46:48	9.0	729.4	8.9	571.4	218.0	12.6
16:47:53	8.8	782.6	9.1	583.5	222.7	11.6
16:48:57	8.6	874.5	9.3	617.8	230.4	11.6
16:50:01	8.5	799.2	9.3	626.6	222.6	10.7
16:51:05	8.6	725.4	9.2	613.2	221.4	11.6
16:52:09	8.8	763.0	9.2	604.9	223.0	11.6
16:53:13	8.8	783.9	9.2	608.2	227.9	11.5
16:54:17	9.0	695.1	9.0	587.4	222.6	11.5
16:55:20	9.2	642.6	8.9	564.1	219.9	11.5
16:56:24	9.2	620.5	8.9	564.3	218.5	10.6
16:57:27	9.1	680.8	8.9	575.8	221.0	

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 1 04-30-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
16:58:31	9.1	698.2	8.9	585.9	221.5	
16:59:35	9.1	698.5	8.6	579.4	214.4	
17:00:39						
17:01:42	-					
17:02:46						
17:03:50	8.4	848.7	9.4	608.1	194.0	15.3
17:04:54	8.6	751.3	7.2	643.1	206.4	18.1
17:05:58	9.9	647.9	8.2	558.7	215.3	17.1
17:07:01	10.3	630.5	8.0	506.0	212.3	18.0
17:08:05	10.4	629.4	7.9	491.9	209.3	19.9
17:09:09	10.5	631.8	7.9	485.4	208.9	20.8
17:10:13	10.2	685.5	8.2	518.1	208.8	21.7
17:11:16	10.1	659.5	8.2	529.1	206.6	22.7
17:12:20	10.1	657.0	8.2	531.1	206.1	25.4
17:13:24	10.4	629.2	8.0	508.8	207.1	29.2
17:14:28	10.4	656.2	8.0	499.1	207.4	28.3
17:15:32	10.4	692.8	8.0	504.7	205.9	28.2
17:16:35	10.3	738.6	8.1	519.8	207.2	28.2
17:17:39	10.1	873.2	8.2	539.2	210.3	29.9
17:18:43	10.1	914.5	8.2	544.7	214.4	32.9
17:19:46	9.9	1027.8	8.4	561.9	216.9	36.9
17:20:51	9.9	1062.6	8.3	566.4	219.9	40.9
17:21:55	10.1	936.1	8.2	545.7	214.7	43.9
17:22:59	10.3	822.0	8.1	510.3	210.5	47.7
17:24:03	10.2	863.2	8.1	516.5	210.4	49.4
17:25:07	10.1	994.3	8.2	541.0	216.5	49.4
17:26:11	10.1	1011.4	8.2	548.6	215.1	49.4
17:27:15	10.1	1086.7	8.2	550.9	216.2	48.4
17:28:19	10.3	1049.4	8.0	533.0	217.0	46.5
17:29:23	10.4	1219.3	7.9	538.1	222.3	43.7

POINTS	71	71	71	71	71	69
MEAN	9.3	842.8	8.8	576.9	218.9	22.4
STD. DEV.	0.7	156.3	0.5	47.9	12.0	11.0

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 1 04-30-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
17:35:05	9.6	1423.1	8.6	540.5	170.0	31.7
17:36:08	8.8	1425.4	9.0	650.5	204.3	31.7
17:37:11	8.7	1312.5	9.0	637.9	210.0	30.7
17:38:15	8.8	1214.4	8.9	613.0	214.8	31.6
17:39:18	9.0	1007.7	8.8	583.8	210.6	32.6
17:40:22	9.2	941.2	8.7	561.5	212.1	33.3
17:41:25	9.0	1100.9	8.8	583.7	217.7	36.2
17:42:29	9.0	1143.6	8.9	591.9	220.9	44.5
17:43:32	8.8	1192.6	9.0	599.8	227.8	47.3
17:44:36	8.7	1326.4	9.0	612.4	239.5	43.5
17:45:39	8.8	1442.3	8.9	624.0	252.7	39.8
17:46:43	8.5	1813.4	9.1	654.2	277.6	22.3
17:47:47	8.4	1758.2	9.2	662.4	277.9	20.4
17:48:50	8.4	1651.9	9.2	652.4	274.0	19.5
17:49:54	8.5	1322.4	9.2	619.7	268.2	18.6
17:50:58	8.5	1558.3	9.3	642.4	272.5	17.6
17:52:02	8.5	1376.9	9.2	634.8	259.2	15.8
17:53:05	9.0	1024.3	8.9	586.1	236.0	14.9
17:54:09	8.9	1001.9	9.1	592.6	235.1	13.0
17:55:12	8.6	1075.9	9.2	614.2	240.5	12.1
17:56:16	8.5	1191.2	9.3	637.6	252.7	12.1
17:57:20	8.5	1099.7	9.3	638.7	241.3	12.1
17:58:23	8.7	899.0	9.2	612.0	227.7	12.1
17:59:27	8.7	831.0	9.2	610.4	224.7	12.1
18:00:31						
18:01:35						
18:02:38						
18:03:42	9.8	734.9	8.3	497.9	192.6	24.8
18:04:46	9.7	713.8	8.3	530.1	194.9	25.7
18:05:50	9.5	727.7	8.5	543.3	196.1	26.7
18:06:54	9.3	815.6	8.7	565.3	207.0	25.7
18:07:57	9.1	876.8	8.7	582.3	212.8	22.1
18:09:01	9.0	894.2	8.8	588.5	217.6	15.6
18:10:05	9.1	802.7	8.7	579.8	213.6	14.8
18:11:09	9.1	791.9	8.6	562.1	216.1	14.8
18:12:13	9.1	791.8	8.8	569.8	216.3	14.8
18:13:14	9.1	791.2	8.8	580.2	217.9	18.4
18:14:20	9.1	791.3	8.6	555.5	216.8	24.7
18:15:24	9.1	791.1	8.5	543.2	217.7	28.4
18:16:28	9.1	791.5	8.6	550.9	220.1	28.4
18:17:32	9.3	778.4	8.6	558.9	219.1	28.4
18:18:36	9.5	742.8	8.5	550.1	218.7	28.3
18:19:40	9.5	811.8	8.5	552.6	221.8	27.4
18:20:44	9.6	833.2	8.4	547.9	222.9	27.4
18:21:48	9.6	881.6	8.5	553.4	223.6	25.5
18:22:53	9.3	1044.0	8.7	587.0	233.8	21.9
18:23:56	9.0	1105.9	8.9	614.2	236.0	15.5
18:25:00	9.0	966.7	9.0	609.8	230.5	13.8
18:26:03	9.0	885.8	9.0	604.0	226.6	11.9
18:27:07	9.1	960.2	8.9	606.0	234.3	12.8
18:28:11	8.8	1060.7	9.0	623.5	246.3	12.8

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 1 04-30-87

TIME	O2 (%)	CO (PPMV)	CO2 (%)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
18:29:14	8.7	1015.4	9.2	637.9	242.5	28.2
18:30:18						
18:31:22						
18:32:25						
18:33:29	9.9	742.9	8.2	510.9	188.2	24.5
18:34:33	9.9	749.2	8.2	534.8	193.3	24.5
18:35:37	9.7	808.7	8.3	546.2	202.2	24.5
18:36:41	9.6	872.5	8.3	545.6	207.9	21.8
18:37:44	9.3	888.8	8.6	554.4	209.0	19.1
18:38:48	9.1	955.1	8.8	575.9	215.8	16.3
18:39:52	8.9	946.2	8.8	594.1	218.6	14.6
18:40:56	8.9	931.6	8.9	588.0	220.1	12.7
18:41:59	8.7	1012.8	9.0	605.8	225.9	11.8
18:43:03	8.6	1054.9	9.1	618.0	232.3	10.9
18:44:07	8.6	920.5	9.1	613.5	225.0	10.1
18:45:11	8.8	829.2	9.0	595.0	221.7	10.0
18:46:15	8.8	795.7	9.0	591.0	222.1	10.9
18:47:18	8.9	709.4	8.8	575.5	217.5	10.0
18:48:22	9.3	635.2	8.5	539.3	210.1	10.0
18:49:26	9.7	597.8	8.3	500.9	207.7	10.9
18:50:29	9.9	599.5	8.1	488.4	208.9	10.0
18:51:34	10.1	613.4	8.0	482.3	207.3	10.0
18:52:38	9.8	625.2	8.1	490.3	206.5	10.0
18:53:42	9.8	621.9	8.3	503.8	203.8	10.0
18:54:46	9.6	647.2	8.5	531.7	202.9	10.0
18:55:49	9.4	714.9	8.6	552.4	208.2	10.0
18:56:53	9.4	686.8	8.5	550.9	207.4	10.0
18:57:57	9.5	653.6	8.5	538.6	208.0	10.0
18:59:01	9.5	672.8	8.5	537.4	208.0	
19:00:05	9.4	699.9	8.6	554.0	209.6	
19:01:10						
19:02:14						
19:03:18						
19:04:22	9.7	729.8	8.4	497.6	180.1	13.5
19:05:26	9.5	743.3	8.5	556.0	186.3	12.6
19:06:30	9.4	737.9	8.6	569.2	192.5	12.6
19:07:34	9.3	716.5	8.7	573.9	201.5	11.7
19:08:38	9.4	691.9	8.5	560.5	207.1	11.7
19:09:42	9.5	672.6	8.6	557.3	210.6	11.7
19:10:46	9.3	680.0	8.7	564.3	212.7	11.7
19:11:50	9.5	709.6	8.6	561.1	214.8	10.8
19:12:53	9.5	679.6	8.5	556.1	215.1	11.6
19:13:57	9.5	711.0	8.5	555.1	217.7	11.3
19:15:01	9.7	648.9	8.4	539.8	216.6	10.7
19:16:05	9.8	632.8	8.3	530.8	217.9	10.7
19:17:08	9.6	692.7	8.5	550.0	219.1	10.7
19:18:12	9.7	668.1	8.4	547.0	217.2	10.7
19:19:15	9.8	633.5	8.3	531.8	211.9	10.7
19:20:19	9.7	621.3	8.4	537.9	214.6	10.7
19:21:23	9.5	640.2	8.6	558.8	217.7	10.7
19:22:26	9.2	687.6	8.9	588.6	219.9	10.7
19:23:30	9.2	626.6	8.8	586.0	219.3	9.9
19:24:34	9.6	610.9	8.5	553.3	219.8	9.9
19:25:38	10.0	593.7	8.2	520.9	220.5	9.9
19:26:42	9.9	601.2	8.4	531.9	220.3	9.0
19:27:45	9.4	641.1	8.7	568.8	221.1	9.0

SEWAGE SLUDGE - JACKSONVILLE. FL DAY 1 04-30-87

	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
POINTS	98	98	98	98	98	96
MEAN	9.2	890.1	8.7	572.1	219.6	17.9
STD. DEV.	0.4	279.9	0.3	40.3	19.3	9.1

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 1 04-30-87

TIME	CO2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
A	B	C	D	E	F	
19:33:13						
19:34:16						
19:35:19	9.3	657.9	8.7	564.3	196.4	8.9
19:36:22	9.6	623.9	8.4	565.1	206.3	8.9
19:37:26	9.9	622.8	8.2	543.2	211.0	8.9
19:38:29	10.1	599.6	8.1	513.3	213.0	8.9
19:39:33	9.9	612.4	8.2	520.0	212.0	8.9
19:40:36	9.9	628.1	8.3	521.1	213.4	9.8
19:41:40	9.8	652.7	8.4	532.2	215.3	9.8
19:42:44	9.7	653.4	8.4	544.2	212.9	9.8
19:43:47	9.7	639.8	8.4	543.9	214.3	9.8
19:44:51	9.8	614.4	8.3	530.6	212.2	8.9
19:45:54	9.8	624.1	8.4	533.6	214.8	8.9
19:46:58	9.7	649.0	8.4	541.1	214.7	8.9
19:48:02	9.6	652.9	8.5	550.9	216.4	8.9
19:49:06	9.7	654.3	8.4	544.9	219.5	8.9
19:50:10	9.8	611.1	8.3	527.4	217.0	8.9
19:51:13	9.8	614.6	8.4	536.7	217.2	8.9
19:52:17	9.7	608.5	8.5	541.1	215.9	8.0
19:53:20	9.7	643.2	8.5	547.8	215.3	8.0
19:54:24	9.7	635.6	8.5	548.5	215.7	8.0
19:55:28	9.9	621.0	8.3	536.0	216.3	8.0
19:56:31	10.2	610.9	8.1	508.1	214.3	8.0
19:57:35	10.2	601.6	8.1	507.3	212.1	8.0
19:58:39	10.0	606.2	8.4	521.8	208.8	8.0
19:59:43						
20:00:46						
20:01:50						
20:02:54	10.6	640.4	8.4	431.2	183.1	7.9
20:03:58	9.5	635.1	8.6	531.4	188.5	7.9
20:05:02	9.5	636.5	8.5	553.1	192.3	8.8
20:06:06	9.5	633.2	8.4	546.3	200.5	8.8
20:07:09	9.2	598.2	8.3	528.1	201.2	8.8
20:08:13	9.2	598.2	8.1	504.6	202.5	8.8
20:09:17	9.2	598.2	7.9	485.4	203.4	8.8
20:10:21	9.2	598.2	7.9	481.0	200.7	8.8
20:11:25	9.2	598.2	8.0	487.0	200.0	8.8
20:12:29	9.2	598.2	8.2	499.1	199.2	9.7
20:13:33	9.2	598.2	8.1	497.7	196.4	9.7
20:14:37	9.2	598.2	8.1	490.0	197.5	9.7
20:15:40	10.0	602.0	8.1	493.3	195.7	9.7
20:16:44	10.0	631.2	8.0	499.6	196.7	9.6
20:17:48	10.0	644.0	8.1	498.5	200.9	10.5
20:18:52	10.0	645.4	8.1	499.0	199.3	10.4
20:19:56	10.1	656.5	8.1	497.2	201.0	10.4
20:21:01	10.0	662.2	8.2	504.9	199.7	10.4
20:22:04	9.9	672.9	8.2	515.4	201.3	
20:23:08	9.9	661.1	8.1	506.1	202.1	
20:24:11	10.1	666.4	8.1	502.8	201.0	
20:25:15	10.0	668.5	8.2	523.8	208.9	
20:26:18	9.7	677.5	8.4	548.0	209.7	

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 1 04-30-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
20:27:22	9.5	686.7	8.4	555.7	209.5	
20:28:26	9.8	667.4	8.1	524.5	211.0	
20:29:30	10.2	632.0	8.0	496.9	211.0	
20:30:33	10.7	528.9	5.9	426.5	145.5	
20:31:37						
20:32:41						
20:33:45						
20:34:48	10.0	656.5	8.3	506.4	192.2	
20:35:52	9.7	629.7	8.4	547.4	196.9	
20:36:56	9.8	630.7	8.2	533.7	201.9	
20:38:00	9.9	625.7	8.2	524.7	204.7	
20:39:04	9.9	614.9	8.2	518.6	205.2	
20:40:07	10.0	585.6	8.1	503.8	207.0	
20:41:11	10.0	596.6	8.3	511.0	205.5	
20:42:15	9.6	597.3	8.2	513.4	204.7	
20:43:19	10.0	598.4	8.0	495.6	205.3	
20:44:23	10.3	610.5	7.9	482.3	205.5	
20:45:26	10.2	624.5	8.0	488.0	204.5	
20:46:30	9.9	757.9	8.4	525.9	210.4	
20:47:34	9.4	843.8	8.6	567.4	215.5	
20:48:37	9.3	823.4	8.8	578.0	215.9	
20:49:42	9.1	802.9	8.8	585.7	215.8	
20:50:46	9.4	711.7	8.5	551.8	212.8	
20:51:50	9.8	632.2	8.2	439.3	212.2	
20:52:54	9.9	657.6	8.2	403.6	210.8	
20:53:58	9.8	697.3	8.2	404.6	211.8	
20:55:02	9.8	731.3	8.3	408.9	213.0	
20:56:06	9.5	843.6	8.7	429.9	217.7	
20:57:10	9.1	820.4	8.9	441.6	217.4	
20:58:14	9.0	796.7	8.9	447.1	218.8	
20:59:18	9.1	680.3	8.8	439.8	214.2	
21:00:22	9.5	612.3	8.5	419.1	213.8	
21:01:26						
21:02:30						
21:03:34						
21:04:39	11.4	667.7	8.0	410.3	186.1	
21:05:43	10.2	655.5	8.0	482.1	190.9	
21:06:47	10.0	652.2	8.3	519.8	198.9	
21:07:51	9.5	651.1	8.6	549.8	202.6	
21:08:54	9.3	652.1	8.8	569.1	206.5	
21:09:58	9.0	652.1	9.0	589.6	210.9	
21:11:02	9.1	609.9	8.7	571.2	214.2	11.9
21:12:06	9.7	583.0	8.3	517.4	212.3	12.8
21:13:09	10.0	577.6	8.1	488.6	210.8	13.6
21:14:13	9.9	579.0	8.4	497.2	208.7	12.8
21:15:17	9.5	609.4	8.7	542.1	209.3	11.9
21:16:20	9.3	609.4	8.7	551.3	211.4	11.0
21:17:24	9.6	577.1	8.3	517.3	211.8	10.2
21:18:27	10.1	574.6	8.0	479.1	212.1	
21:19:31	10.2	576.0	8.1	474.4	208.8	
21:20:35	9.9	595.3	8.4	502.9	209.2	
21:21:39	9.6	589.6	8.5	524.5	210.0	
21:22:43	9.6	573.4	8.5	529.9	207.7	
21:23:46	9.7	571.2	8.4	516.6	204.2	
21:24:50	9.9	567.3	8.3	502.2	204.7	
21:25:54	9.8	566.2	8.5	507.4	204.3	

SEWAGE SLUDGE - JACKSONVILLE. FL DAY 1 04-30-87

	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
POINTS	107	107	107	107	107	48
MEAN	10.5	599.4	7.8	479.4	192.4	9.4
STD.DEV.	2.4	142.0	1.8	109.7	47.5	1.3

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 1 04-30-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
21:34:05						
21:35:08						
21:36:11	10.2	589.5	8.1	470.2	189.0	11.0
21:37:14	10.3	582.3	8.1	488.1	190.2	10.1
21:38:18	10.3	580.9	8.0	497.4	203.1	9.3
21:39:21	10.5	579.4	7.9	485.6	209.6	9.3
21:40:25	10.5	583.0	7.9	484.5	211.5	8.5
21:41:28	10.5	588.0	7.9	485.1	211.9	8.5
21:42:32	10.5	588.4	8.0	487.5	211.7	8.5
21:43:36	10.3	584.8	8.1	497.8	211.8	8.5
21:44:39	10.1	586.6	8.3	516.1	212.3	8.5
21:45:43	9.8	586.6	8.4	531.6	214.1	8.3
21:46:46	10.0	591.3	8.3	523.0	216.4	8.5
21:47:50	9.9	571.5	8.4	530.1	215.2	8.5
21:48:53	9.8	570.1	8.6	541.6	214.4	8.5
21:49:57	9.7	577.6	8.5	551.0	214.6	8.5
21:51:01	10.1	578.4	8.2	516.8	215.2	8.5
21:52:05	10.4	581.9	8.0	489.6	213.9	8.5
21:53:08	10.5	579.4	8.0	481.7	215.2	8.5
21:54:12	10.4	582.3	8.1	490.0	214.1	8.5
21:55:15	10.3	577.3	8.1	495.8	212.6	8.5
21:56:19	10.3	576.6	8.1	495.9	211.9	8.5
21:57:22	10.2	570.1	8.3	506.4	213.5	8.5
21:58:27	10.2	579.1	8.1	505.5	213.2	9.3
21:59:30	10.5	581.9	7.9	480.2	215.0	9.3
22:00:34	10.4	573.7	8.0	487.2	209.3	9.3
22:01:38						
22:02:42						
22:03:45						
22:04:49						
22:05:53	10.5	631.8	7.9	484.1	211.2	9.3
22:06:57	10.6	624.2	7.9	478.8	212.3	9.3
22:08:01	10.4	638.2	8.2	493.2	212.6	9.3
22:09:05	10.1	626.4	8.4	519.0	211.5	9.3
22:10:09	10.1	613.8	8.3	519.4	212.5	9.3
22:11:12	10.3	616.7	8.1	493.0	211.2	9.3
22:12:16	10.4	627.5	8.1	490.1	207.9	9.3
22:13:20	10.3	612.0	8.2	490.7	205.4	
22:14:24	10.3	611.3	8.2	489.8	205.0	
22:15:27	10.2	618.5	8.2	497.9	202.7	
22:16:31	10.3	616.7	8.1	487.5	203.3	5.9
=====						
POINTS	35	35	35	35	35	32
MEAN	10.3	593.7	8.1	499.5	210.2	8.9
STD. DEV.	0.2	20.0	0.2	18.8	6.2	0.8

SEWAGE SLUDGE - JACKSONVILLE. FL DAY 2 03-01-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
A	B	C	D	E	F	
11:27:37	10.1	915.8	8.4	462.0	226.6	16.2
11:28:40	9.7	1044.8	8.7	529.6	239.0	9.8
11:29:44	10.1	908.8	8.4	512.4	231.7	9.8
11:30:48	10.4	814.8	8.2	476.0	226.7	9.8
11:31:52	10.4	836.1	8.2	477.8	225.9	9.8
11:32:55	10.4	887.2	8.3	487.6	230.1	9.8
11:33:59	10.4	833.7	8.2	485.4	224.8	9.8
11:35:04	10.5	845.6	8.1	481.2	224.5	9.8
11:36:07	10.6	866.2	8.0	472.4	227.4	10.7
11:37:11	10.6	962.4	8.1	477.6	232.4	13.1
11:38:15	10.8	891.1	7.9	467.0	226.3	12.5
11:39:19	10.5	996.7	8.1	478.3	231.2	11.5
11:40:23	10.4	1019.5	8.2	494.2	234.0	10.7
11:41:27	10.5	919.1	8.1	483.2	229.9	10.7
11:42:31	10.3	916.3	8.3	492.9	227.3	13.1
11:43:35	10.2	982.8	8.4	509.5	232.0	13.8
11:44:40	10.1	1027.2	8.4	521.1	236.6	13.8
11:45:44	10.2	1025.8	8.3	515.8	235.5	13.1
11:46:48	10.3	1050.3	8.3	511.6	240.1	12.5
11:47:52	10.4	1006.3	8.3	502.7	237.2	10.7
11:48:56	10.4	942.3	8.3	495.4	230.3	10.7
11:50:00	10.4	919.2	8.2	482.6	222.5	10.7
11:51:05	10.4	924.9	8.2	473.3	222.6	11.5
11:52:09	10.5	917.2	8.1	468.9	216.9	13.8
11:53:14	10.8	914.7	7.9	456.0	218.5	19.4
11:54:18	10.5	1076.4	8.2	472.4	228.8	20.2
11:55:22	10.3	1196.0	8.3	498.7	232.5	
11:56:26	10.3	1100.5	8.3	496.7	228.6	
11:57:30	10.4	1036.9	8.2	475.7	225.5	
11:58:34	10.4	1000.5	8.2	473.8	218.0	
11:59:38	10.5	954.7	8.1	458.5	214.7	19.4
12:00:42	10.5	986.2	8.1	459.2	214.6	21.0
12:01:46						
12:02:50						
12:03:54						
12:04:58	10.5	1121.1	8.4	438.5	203.4	27.3
12:06:02	9.7	1192.4	8.6	491.8	213.1	10.7
12:07:05	10.4	908.2	8.4	485.3	213.6	11.5
12:08:09	10.3	908.2	8.3	459.2	215.9	13.1
12:09:13	10.3	938.1	8.3	464.3	216.4	13.8
12:10:16	10.5	845.0	8.0	450.0	215.0	17.0
12:11:21	10.5	898.2	8.1	444.9	215.0	17.7
12:12:24	10.5	955.3	8.1	451.2	215.4	20.2
12:13:29	10.2	1128.9	8.3	474.2	226.1	18.6
12:14:33	10.0	1235.6	8.5	495.5	233.2	17.0
12:15:38	10.2	1103.7	8.2	475.1	226.2	22.5
12:16:42	10.1	1171.6	8.4	475.6	232.6	24.9
12:17:46	9.6	1394.2	8.6	515.8	246.8	17.0
12:18:50	10.1	1164.7	8.3	489.1	237.2	17.7
12:19:54	10.5	1063.5	8.2	458.4	235.5	18.6
12:20:58	10.2	1149.7	8.3	468.3	237.0	20.2

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 2 05-01-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
12:22:03	10.0	1186.8	8.5	473.7	231.7	18.6
12:23:07	10.0	1078.3	8.4	471.9	227.5	15.4
12:24:11	10.2	971.2	8.3	454.0	220.4	13.1
12:25:15	10.1	935.2	8.4	457.8	219.5	12.3
12:26:19	9.7	959.0	8.8	479.1	216.0	11.5
12:27:23	9.2	988.8	9.1	522.8	221.3	9.8
12:28:27	9.5	852.3	8.9	512.1	215.2	9.8
12:29:32	9.4	810.3	9.1	520.8	215.7	9.1
12:30:36						
12:31:40						
12:32:44						
12:33:48	11.2	694.4	8.2	365.7	227.3	8.3
12:34:53	10.5	687.4	8.0	423.2	218.3	8.3
12:35:57	10.9	664.7	7.6	410.6	217.6	8.3
12:37:02	11.5	664.0	7.1	371.1	216.8	9.1
12:38:06	12.0	683.6	6.6	331.8	215.9	9.1
12:39:10	12.6	729.1	6.2	298.0	214.6	9.8
12:40:14	13.0	792.5	6.0	280.2	212.4	10.7
12:41:18	13.2	875.2	5.6	260.3	205.3	11.5
12:42:23	13.8	905.3	5.3	238.7	199.0	13.8
12:43:27	13.9	1018.5	5.1	236.4	197.3	15.4
12:44:31	14.4	1132.7	4.8	231.6	194.4	17.8
12:45:35	14.7	1202.4	4.5	224.4	190.3	19.4
12:46:40	14.8	1305.0	4.4	219.1	186.6	20.2
12:47:44	14.9	1419.2	4.4	216.0	191.3	21.0
12:48:48	14.5	1473.6	4.6	218.9	196.0	21.7
12:49:52	14.5	1475.0	4.6	221.6	194.1	21.7
12:50:56	14.4	1489.7	4.7	230.2	193.2	21.7
12:52:00	14.3	1475.1	4.8	235.0	192.2	21.7
12:53:05	14.0	1473.3	4.9	246.6	192.7	
12:54:09	13.7	1400.5	5.2	267.7	189.1	
12:55:14	12.3	1152.5	6.4	322.3	172.1	26.5
12:56:18	11.2	1095.4	7.3	392.3	166.0	24.9
12:57:23	10.3	1074.1	8.1	453.2	167.8	22.4
12:58:27	10.0	1016.3	8.3	486.1	170.5	17.5
12:59:32	9.4	1010.3	8.8	514.5	172.9	16.9

POINTS	81	81	81	81	81	75
MEAN	11.0	1021.4	7.6	428.1	216.5	15.0
STD. DEV.	1.5	196.6	1.3	96.7	18.2	5.0

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 2 05-01-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
13:03:20	10.6	729.7	6.7	404.5	129.5	
13:04:23						
13:05:26						
13:06:30						
13:07:33	9.6	815.2	8.7	452.1	169.5	
13:08:36	9.4	813.8	8.8	470.4	177.2	
13:09:40	9.5	790.7	8.7	467.9	180.8	
13:10:44	9.7	749.4	8.6	444.9	184.4	
13:11:47	9.7	769.7	8.6	442.8	186.4	
13:12:51	9.7	765.9	8.7	442.5	191.1	
13:13:54	9.7	756.8	8.7	437.4	193.9	
13:14:58	9.6	845.8	8.8	447.4	200.1	
13:16:01	9.2	1007.0	9.0	473.6	209.9	
13:17:05	9.4	976.9	8.8	472.8	210.3	
13:18:08	9.8	869.0	8.5	442.9	205.9	
13:19:12	10.4	795.7	8.0	410.7	203.6	
13:20:16	11.3	689.5	7.5	361.8	196.2	
13:21:20	11.2	704.6	7.6	361.5	193.5	
13:22:23	10.7	737.6	8.0	393.4	193.8	
13:23:27	10.4	736.5	8.3	420.6	190.3	
13:24:30	10.2	733.0	8.4	440.8	191.7	
13:25:34	10.0	752.3	8.5	453.8	192.8	
13:26:37	10.2	754.4	8.3	444.5	193.9	
13:27:41	10.4	766.3	8.2	433.2	195.3	
13:28:45	10.4	831.9	8.2	446.1	200.9	
13:29:49	10.8	854.7	7.7	416.4	203.9	
13:30:53						
13:31:56						
13:33:00						
13:34:04						
13:35:08						
13:36:12	10.9	1047.3	7.7	408.3	194.4	49.2
13:37:16	10.9	1119.5	7.6	431.4	194.2	49.2
13:38:20	10.8	1158.5	7.7	440.9	196.9	49.2
13:39:23	10.8	1158.5	7.9	461.2	200.9	49.2
13:40:27	10.4	1154.0	8.1	472.5	202.9	49.2
13:41:31	10.4	1150.8	8.4	504.5	206.1	49.2
13:42:35	10.4	1154.4	8.4	519.9	213.3	49.2
13:43:39	10.4	1154.5	8.7	534.3	215.1	49.2
13:44:42	9.2	1611.6	9.0	562.2	221.9	49.2
13:45:46	9.1	1618.7	9.0	568.6	227.4	49.2
13:46:50	9.0	1491.1	9.1	573.8	226.0	35.2
13:47:54	9.1	1339.2	9.1	552.7	224.0	16.2
13:48:59	9.5	1050.3	8.8	515.9	210.6	14.6
13:50:03	9.9	838.4	8.5	468.1	202.1	14.6
13:51:07	10.0	813.9	8.5	461.8	200.4	14.6
13:52:11	10.1	848.6	8.4	459.2	202.2	17.8
13:53:14	9.9	876.7	8.6	472.7	203.3	19.4
13:54:18	9.6	946.5	8.8	495.1	206.7	24.9
13:55:21	9.6	916.4	8.6	485.4	199.7	28.1
13:56:25	9.8	905.5	8.6	471.0	198.4	27.3

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 2 05-01-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
13:57:29	9.6	1005.8	8.7	489.3	205.7	14.6
13:58:32	9.2	1122.3	9.0	524.4	214.3	13.8
13:59:36	9.1	1126.9	9.0	537.7	218.5	13.1
14:00:40						
14:01:43						
14:02:47						
14:03:51						
14:04:55	9.2	1170.8	9.0	502.4	217.8	17.8
14:05:59	9.1	1140.0	9.1	528.5	222.7	13.8
14:07:02	9.3	989.5	9.0	531.6	229.8	12.3
14:08:06	9.4	956.9	8.9	526.0	233.8	12.3
14:09:10	9.4	975.5	8.9	524.6	239.7	12.3
14:10:14	9.5	906.7	8.8	511.1	231.0	11.5
14:11:18	9.9	808.5	8.5	477.0	224.9	12.3
14:12:21	9.9	839.0	8.5	468.1	228.0	13.1
14:13:25	10.4	845.4	8.1	448.4	222.6	17.0
14:14:29	10.4	958.4	8.2	454.8	226.7	22.5
14:15:33	10.2	1029.3	8.3	467.3	231.9	22.5
14:16:36	9.9	1165.4	8.5	490.8	235.6	19.4
14:17:40	9.7	1122.6	8.7	505.6	232.6	16.2
14:18:44	9.7	1012.5	8.7	509.2	229.9	16.2
14:19:48	9.6	1024.8	8.8	516.0	230.4	12.3
14:20:52	9.6	990.0	8.8	515.0	226.6	10.7
14:21:56	9.7	994.3	8.7	510.5	225.7	11.5
14:23:00	9.9	882.7	8.5	490.5	218.3	19.4
14:24:04	9.8	887.2	8.6	484.9	211.6	18.6
14:25:08	9.9	867.6	8.6	478.1	210.0	13.1
14:26:12	9.9	868.3	8.6	479.2	209.3	12.3
14:27:16	9.8	866.2	8.7	489.9	208.0	11.5
14:28:20	9.8	811.8	8.6	491.3	205.2	10.7
14:29:23	10.0	829.7	8.5	473.8	206.7	11.5
14:30:28	10.0	788.0	8.5	470.2	203.2	12.3
14:31:32	9.9	850.1	8.5	480.1	207.4	20.2
14:32:36	10.4	861.7	7.2	447.3	166.7	
14:33:40						
14:34:44						
14:35:48						
14:36:52	9.3	1000.8	8.9	479.3	209.7	21.7
14:37:56	9.5	1041.0	8.9	486.7	213.8	24.9
14:38:59	9.5	1041.0	8.8	488.3	219.5	26.5
14:40:03	9.5	1041.0	8.7	488.2	222.1	31.2
14:41:07	9.5	1041.0	8.7	494.6	231.6	14.6
14:42:10	9.5	1041.0	9.0	527.6	246.0	13.1
14:43:14	9.5	1041.0	8.9	536.5	255.1	14.6
14:44:18	9.5	1041.0	8.7	516.4	246.2	17.0
14:45:21	9.7	1078.9	8.7	484.9	238.4	18.6
14:46:25	9.6	1200.0	8.7	503.4	244.6	20.2
14:47:28	9.6	1204.3	8.6	496.5	242.6	26.5
14:48:32	9.9	1117.9	8.4	475.4	235.0	40.7
14:49:36	10.0	1298.8	8.4	474.0	244.9	51.0
14:50:40	10.0	1518.3	8.3	480.4	255.8	58.9
14:51:44	10.0	1807.0	8.2	488.2	264.9	60.5
14:52:47	10.0	1873.7	8.2	491.8	263.0	62.8
14:53:51	10.1	1913.1	8.1	482.4	261.6	66.8
14:54:55	10.2	1982.7	8.0	488.9	260.1	72.5
14:55:59	10.3	1893.8	7.9	482.2	253.3	73.9

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 2 05-01-87

	O ₂ (%V)	CO (PPMV)	CO ₂ (%V)	SO ₂ (PPMV)	NOX (PPMV)	THC (PPMV)
POINTS	92	92	92	92	92	68
MEAN	9.9	1051.7	8.5	478.6	214.4	27.1
STD.DEV.	0.5	300.8	0.4	40.2	23.0	17.7

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 2 05-01-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
15:04:19	8.8	2839.0	8.8	591.5	263.9	78.6
15:05:22	9.0	2738.9	8.5	580.7	263.2	78.6
15:06:26	8.5	3420.4	8.9	606.4	278.5	78.6
15:07:29	8.2	3819.1	9.0	632.0	293.0	78.6
15:08:32	7.9	3914.7	9.2	638.2	303.2	78.6
15:09:36	8.1	3399.2	9.1	604.0	288.4	78.7
15:10:39	8.3	3247.5	9.0	586.3	291.1	78.7
15:11:43	8.4	3176.6	9.0	579.4	290.4	78.7
15:12:47	8.1	3167.5	9.2	583.1	291.0	78.7
15:13:50	8.0	3187.6	9.2	590.5	297.1	78.7
15:14:54	7.8	3405.5	9.3	608.0	322.0	78.7
15:15:57	7.4	3915.6	9.5	646.0	352.5	78.7
15:17:01	7.2	3977.5	9.5	652.7	357.2	78.7
15:18:04	7.2	3938.3	9.5	644.9	358.8	78.7
15:19:08	7.7	3924.0	9.1	624.1	365.4	78.7
15:20:12	8.0	3873.8	9.1	604.3	349.3	78.7
15:21:16	8.2	3558.7	9.1	597.8	325.5	78.7
15:22:20	8.0	3893.3	9.2	626.9	338.3	78.7
15:23:23	7.5	4290.4	9.5	663.9	356.1	78.7
15:24:27	7.2	4575.8	9.6	676.6	376.4	78.7
15:25:30	7.1	4743.2	9.6	672.8	396.6	78.7
15:26:34	7.1	4658.9	9.5	655.5	393.1	78.7
15:27:38	7.5	4429.9	9.3	628.6	388.1	78.7
15:28:42	7.7	4292.3	9.3	615.5	380.6	78.7
15:29:46	7.8	4010.2	9.2	601.6	364.6	78.7
15:30:49	8.1	3862.7	9.2	587.1	360.1	78.7
15:31:53	7.7	4429.9	9.5	624.8	395.2	78.7
15:32:57	7.1	4780.4	9.6	652.4	422.0	78.7
15:34:01	7.1	4753.4	9.6	645.0	431.2	78.7
15:35:05	7.3	4662.5	9.4	622.0	431.3	78.7
15:36:09	7.7	4390.9	9.3	586.6	399.2	78.7
15:37:12	7.9	4378.4	9.2	580.4	397.3	78.7
15:38:16	7.7	4517.0	9.3	591.2	406.9	78.7
15:39:20	7.3	4765.2	9.5	619.9	422.7	78.7
15:40:24	7.4	4721.0	9.3	603.9	425.7	78.7
15:41:28	7.8	4532.4	9.3	577.2	418.1	78.7
15:42:31	7.7	4545.5	9.4	585.9	426.2	78.7
15:43:35	7.3	4631.7	9.5	607.2	436.2	78.7
15:44:39	7.1	4739.7	9.6	620.7	444.4	78.7
15:45:43	7.0	4839.6	9.6	617.3	463.8	78.7
15:46:47	6.7	4830.9	9.9	623.6	461.3	78.7
15:47:51	7.2	4553.0	9.5	558.4	429.5	78.7
15:48:55	7.9	3776.1	9.3	488.6	380.8	78.7
15:50:00	8.7	2990.8	9.0	455.7	344.6	75.6
15:51:04	8.4	3430.0	9.2	495.6	380.6	72.5
15:52:08	7.8	4024.6	9.5	542.0	413.9	69.4
15:53:11	7.8	3667.1	9.5	524.6	394.2	63.2
15:54:15	8.8	2112.4	9.0	473.4	299.8	53.3
15:55:18	9.4	1652.9	8.8	460.9	278.3	51.0
15:56:22	9.9	1593.5	8.7	458.8	274.8	32.0
15:57:26	9.8	1460.7	8.5	457.0	267.1	32.0

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 2 05-01-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
15:58:29	9.7	1641.1	8.6	470.8	275.2	39.9
15:59:33	9.5	1839.4	8.8	493.4	285.8	42.3
16:00:37	9.5	1670.0	8.8	500.4	277.8	31.2
16:01:40	9.8	1312.7	8.5	466.1	259.5	23.3
16:02:44	10.1	1078.2	8.4	440.4	247.2	19.4
16:03:47	9.9	1200.6	8.6	452.4	258.2	27.3
16:04:52	9.6	1491.4	8.8	492.1	272.9	35.2
16:05:55	9.5	1525.9	8.7	491.7	274.3	27.3
16:06:59	10.0	1164.8	8.4	449.9	252.0	21.0
16:08:03	10.0	1256.6	8.4	448.0	258.6	21.7
16:09:07	10.0	1179.9	8.5	452.8	251.8	22.5
16:10:10	9.9	1198.6	8.5	457.2	251.3	21.7
16:11:14	9.9	1157.1	8.5	459.1	247.8	23.3
16:12:18	10.1	1192.6	8.4	450.6	251.1	27.3
16:13:22	9.9	1335.8	8.5	467.3	261.3	32.8
16:14:26	9.5	1696.7	8.8	509.7	278.4	35.2
16:15:29	9.6	1454.4	8.7	499.8	266.4	36.8
16:16:33	9.7	1462.2	8.6	469.1	264.9	35.9
16:17:37	9.6	1552.2	8.8	481.8	271.5	35.2
16:18:40	9.3	1684.2	8.9	500.8	275.7	33.6
16:19:45	9.4	1648.3	8.9	484.2	271.8	33.6
16:20:49	9.5	1632.9	8.8	470.8	270.4	32.8
16:21:52	9.6	1478.5	8.7	460.0	264.6	31.2
16:22:56	9.7	1472.9	8.6	454.8	268.7	29.6
16:24:00	9.7	1569.7	8.6	457.3	271.2	28.9
16:25:04	9.7	1584.8	8.6	459.8	270.9	
16:26:08	9.8	1455.0	8.5	455.5	264.6	
16:27:12	9.6	1712.6	8.6	470.4	272.2	
16:28:16						
16:29:20						
16:30:24						
16:31:28						
16:32:32						
16:33:36	9.7	1433.7	8.8	529.0	224.2	32.0
16:34:40	8.9	1899.7	9.3	604.8	267.3	35.2
16:35:45	8.1	2368.1	9.8	673.7	314.4	46.2
16:36:49	8.1	1795.9	9.7	644.1	292.1	27.3
16:37:53	8.7	1647.1	9.4	565.2	266.3	19.4
16:38:56	8.5	1588.5	9.1	528.6	259.0	17.8
16:40:00	8.1	1588.5	8.8	482.4	250.4	17.8
16:41:04	8.2	1588.5	8.8	473.1	250.1	19.4
16:42:08	8.1	1588.5	8.7	470.0	252.2	21.7
16:43:12	8.4	1588.5	8.9	491.5	264.2	24.9
16:44:15	8.4	1588.5	9.1	517.3	275.3	25.7
16:45:19	8.7	1588.5	9.3	540.5	280.4	25.7
16:46:22	8.8	1251.7	9.4	544.4	279.2	21.7
16:47:26	8.8	1207.0	9.3	541.4	279.7	17.8
16:48:29	8.8	1226.7	9.4	542.8	285.3	14.6
16:49:33	8.9	1017.0	9.3	528.1	268.3	13.8
16:50:37	9.1	951.9	9.2	510.2	264.0	13.1
16:51:40	9.2	948.3	9.2	509.0	261.5	11.5
16:52:44	9.4	841.0	9.0	483.1	251.2	10.7
16:53:48	9.6	860.7	9.0	477.1	250.4	9.9
16:54:52	9.3	896.6	9.2	486.4	246.3	9.9
16:55:56	9.8	920.6	9.3	511.0	247.9	9.1
16:57:00	8.9	931.2	9.3	514.9	250.9	9.1

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 2 03-01-87

	O ₂ (%V)	CO (PPMV)	CO ₂ (%V)	SO ₂ (PPMV)	NOX (PPMV)	THC (PPMV)
POINTS	102	102	102	102	102	99
MEAN	8.7	2597.4	9.1	544.2	313.8	50.9
STD. DEV.	1.0	1421.3	0.4	70.8	64.4	26.9

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 2 05-01-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
17:02:13						
17:03:16						
17:04:20						
17:05:23						
17:06:26						
17:07:30						
17:08:33	11.5	833.0	8.1	372.9	195.9	15.4
17:09:37	10.5	879.1	8.2	453.6	206.3	15.4
17:10:40	10.6	850.6	8.1	450.5	213.0	15.4
17:11:44	10.8	848.5	8.0	440.4	214.7	15.4
17:12:48	10.4	957.0	8.4	461.5	224.2	13.1
17:13:51	10.1	1071.8	8.4	484.4	231.8	13.8
17:14:55	10.6	936.3	8.0	440.2	228.0	14.6
17:15:58	10.7	893.7	8.0	423.9	223.7	15.5
17:17:02	10.5	1016.6	8.3	448.4	232.2	17.0
17:18:06	10.1	1229.3	8.5	478.9	248.3	19.4
17:19:10	10.0	1160.3	8.5	480.3	241.9	20.2
17:20:13	10.1	1062.4	8.5	469.7	240.8	20.2
17:21:17	10.1	1105.0	8.5	471.2	246.8	20.2
17:22:20	10.0	1133.6	8.6	476.3	249.0	20.2
17:23:24	9.8	1113.9	8.7	488.6	248.4	19.4
17:24:28	10.0	1042.4	8.5	471.2	245.6	18.6
17:25:31	10.0	1068.5	8.7	472.5	252.5	17.8
17:26:35	9.5	1252.0	9.1	523.8	265.9	16.2
17:27:39	9.4	1183.7	9.1	529.9	258.3	14.6
17:28:43	9.6	971.3	8.9	498.9	248.0	13.8
17:29:46	9.6	948.1	8.9	497.0	248.9	13.1
17:30:50						
17:31:54						
17:32:58						
17:34:02	10.4	740.6	8.4	426.2	205.9	9.1
17:35:06	10.4	705.0	8.4	450.6	206.9	9.1
17:36:09	10.4	685.7	8.4	456.4	206.3	9.1
17:37:13	10.4	680.7	8.4	456.8	207.8	9.1
17:38:17	10.4	680.3	8.2	437.1	206.5	9.9
17:39:20	10.4	680.4	8.0	419.1	206.3	9.9
17:40:24	10.4	710.7	8.1	418.8	207.9	9.9
17:41:28	10.4	714.6	8.1	426.0	207.9	9.9
17:42:32	10.4	706.2	8.2	430.4	210.9	10.7
17:43:35	10.8	803.4	8.0	417.4	213.7	10.7
17:44:39	11.1	811.2	7.7	395.5	211.9	10.7
17:45:43	11.5	813.3	7.3	368.9	211.1	11.5
17:46:48	11.5	817.6	7.4	366.3	206.7	11.5
17:47:52	11.3	829.9	7.6	382.7	207.4	12.3
17:48:56	11.5	848.7	7.5	386.1	205.0	12.3
17:50:00	11.3	892.3	7.6	400.7	204.5	13.1
17:51:03	11.4	897.2	7.6	405.4	205.1	13.8
17:52:07	11.2	927.2	7.5	411.6	199.8	14.6
17:53:10						
17:54:14						
17:55:18						

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 2 03-01-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
17:56:21	11.8	1149.0	7.4	379.4	176.6	
17:57:25	11.2	1211.4	7.5	436.0	181.9	21.7
17:58:29	11.0	1443.7	7.7	471.8	193.4	42.3
17:59:32	10.6	1612.9	8.1	519.0	201.6	55.0
18:00:36	10.2	1805.8	8.4	560.4	212.4	56.6
18:01:40	9.9	1996.2	8.7	590.7	217.9	56.6
18:02:44	10.0	1934.2	8.6	589.7	220.0	47.1
18:03:47	10.1	2032.2	9.0	599.1	231.2	56.6
18:04:51	10.2	2254.0	9.4	637.8	250.0	56.6
18:05:55	10.4	2287.9	9.4	653.5	256.9	56.6
18:06:59	10.5	1719.2	9.0	592.0	237.8	27.3
18:08:03	10.8	1533.8	8.9	566.4	226.4	22.5
18:09:06	11.0	1376.6	8.7	539.7	217.3	22.5
18:10:10	11.3	1254.6	8.6	518.9	213.5	21.0
18:11:14	11.5	1170.7	8.5	501.7	208.1	21.0
18:12:18	11.8	1181.0	8.5	512.4	205.6	21.0
18:13:21						
18:14:25						
18:15:29						
18:16:32	13.7	1310.8	9.0	542.9	191.2	18.6
18:17:37	13.7	1321.1	9.1	592.9	201.3	17.8
18:18:41	13.5	1211.8	9.2	592.8	208.2	16.2
18:19:45	13.4	1059.8	9.1	575.3	205.8	15.4
18:20:48	13.2	959.7	8.7	529.8	210.4	14.6
18:21:52	13.1	907.1	8.8	515.3	208.2	13.1
18:22:56	13.1	908.2	8.8	524.7	210.2	12.3
18:24:00	13.0	902.9	8.9	528.1	210.9	11.5
18:25:04	13.0	896.6	9.1	546.6	209.0	11.5
18:26:08	12.9	929.8	9.1	558.6	216.8	11.5
18:27:12	12.8	948.5	9.2	561.7	217.9	11.5
18:28:16	12.8	805.6	6.0	478.9	197.6	11.5
18:29:20						
18:30:24						
18:31:28						
18:32:32						
18:33:36						
18:34:40	15.6	865.3	8.6	440.3	189.6	11.5
18:35:44	15.6	1212.1	9.7	629.5	214.3	11.5
18:36:48	15.2	1234.1	10.0	697.8	236.3	24.9
18:37:52	14.6	1162.7	10.1	703.1	258.4	11.5
18:38:55	14.2	931.3	9.9	666.5	257.6	14.6
18:39:59	13.8	750.0	9.6	599.3	254.2	9.1
18:41:03	13.5	682.6	9.4	556.7	252.7	5.9
18:42:07	13.4	630.8	8.9	504.3	250.7	4.4
18:43:10	13.3	628.7	8.5	451.9	249.8	5.2
18:44:14	13.3	660.8	8.4	440.2	248.9	5.9
18:45:17	13.3	664.0	8.4	437.9	243.9	5.9
18:46:21	13.3	658.3	7.6	427.7	240.6	5.9
18:47:24						
18:48:28						
18:49:32	14.7	659.7	8.5	311.6	200.1	5.9
18:50:36	15.0	737.4	9.4	522.7	224.6	5.9
18:51:39	14.7	787.9	9.5	584.2	249.6	3.6
18:52:43	14.4	857.4	9.6	604.3	272.2	3.6
18:53:47	14.1	734.6	9.5	589.0	270.3	3.6
18:54:51	13.8	621.3	9.6	566.6	263.8	3.6

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 2 05-01-87

	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
POINTS	85	85	85	85	85	84
MEAN	11.7	1037.6	8.5	496.9	223.7	17.1
STD. DEV.	1.7	367.2	0.7	80.9	22.4	12.9

SEWAGE SLUDGE - JACKSONVILLE. FL DAY 2 05-01-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
19:12:07						
19:13:10	15.7	574.7	7.3	234.4	201.4	4.4
19:14:13	15.8	608.3	7.4	288.9	192.2	4.4
19:15:16	15.5	595.9	7.3	296.4	184.4	5.2
19:16:19	15.3	596.3	7.2	296.1	181.4	5.2
19:17:23	15.2	611.8	6.8	287.0	179.0	5.9
19:18:26	15.1	624.8	6.8	275.0	178.5	5.9
19:19:30	14.9	648.1	6.8	265.4	178.3	6.7
19:20:34	14.8	630.8	6.8	263.4	176.4	6.7
19:21:37	14.8	645.0	6.8	265.7	179.6	5.9
19:22:41	14.7	647.1	6.9	272.8	178.3	6.7
19:23:44	14.6	648.8	6.9	283.8	179.6	5.9
19:24:48	14.6	641.1	6.9	285.6	179.4	6.7
19:25:51	14.5	638.6	6.9	289.8	183.2	6.7
19:26:55	14.5	633.3	7.0	291.7	183.4	5.9
19:27:59	14.7	648.1	7.0	293.6	184.3	5.9
19:29:03	14.5	661.9	7.1	302.9	195.2	6.7
19:30:07	14.4	662.3	7.0	314.2	203.4	
19:31:10	14.4	654.1	6.3	297.2	184.6	
19:32:14						
19:33:17						
19:34:21	15.3	653.8	6.7	252.7	195.1	9.9
19:35:25	15.4	742.0	7.9	389.7	205.9	10.7
19:36:28	15.1	816.1	8.8	473.0	215.5	11.5
19:37:32	14.7	803.4	9.5	565.2	221.7	11.5
19:38:36	14.3	834.1	10.0	620.7	235.4	12.3
19:39:39	13.7	704.3	9.7	603.0	239.1	5.9
19:40:43	13.4	578.3	8.9	496.8	231.2	3.6
19:41:47	13.4	545.4	8.6	435.2	220.1	3.6
19:42:51	13.3	546.8	8.5	412.9	218.0	3.6
19:43:55	13.3	554.6	8.6	409.4	219.9	3.6
19:44:58	13.3	540.8	8.9	423.9	220.4	3.6
19:46:02	13.2	542.6	8.9	440.8	219.7	4.4
19:47:06	12.9	551.4	8.6	417.1	219.1	5.2
19:48:10	12.9	570.5	8.4	400.6	218.5	5.2
19:49:13	12.8	570.5	8.4	389.3	218.9	5.2
19:50:17	12.7	588.8	8.4	401.3	218.4	5.2
19:51:21	12.6	575.1	8.0	367.1	217.9	5.2
19:52:25	12.5	592.7	7.9	351.3	217.5	5.2
19:53:29	12.5	589.2	8.1	359.5	216.8	5.2
19:54:33	12.5	576.1	8.0	357.7	216.9	5.2
19:55:37	12.5	579.7	7.8	340.6	215.6	5.2
19:56:41	12.5	580.0	7.6	321.9	213.7	5.9
19:57:45	12.6	595.5	7.3	306.8	212.5	5.9
19:58:49	12.7	594.1	7.3	301.4	211.3	6.7
19:59:53	12.7	594.5	7.4	303.6	209.0	6.7
20:00:57						
20:02:01						
20:03:04						
20:04:08	13.4	550.0	6.7	212.4	195.7	6.7
20:05:11	13.5	638.3	7.1	311.0	202.6	6.7

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 2 05-01-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
20:06:15	13.4	631.2	6.8	307.2	189.9	6.7
20:07:19	13.4	621.0	6.8	292.8	181.9	6.7
20:08:22	13.3	616.0	6.8	290.8	182.4	7.5
20:09:26	13.3	619.9	6.8	290.3	181.9	7.5
20:10:30	13.2	630.1	6.8	293.3	183.7	7.5
20:11:33	13.2	646.4	6.8	290.8	184.2	7.5
20:12:37	13.2	640.4	7.0	296.2	185.1	7.5
20:13:41	13.1	641.1	7.2	307.2	186.4	8.3
20:14:45	13.0	648.1	7.3	322.0	189.9	8.3
20:15:49	12.9	654.1	7.3	328.5	193.8	8.3
20:16:52	12.8	659.4	7.2	327.2	196.4	9.1
20:17:56	12.8	677.8	7.1	321.2	197.5	6.7
20:19:00	12.8	684.1	6.8	302.1	196.6	9.9
20:20:04	12.8	692.3	6.8	299.2	196.4	9.9
20:21:08	12.7	704.6	6.8	302.4	197.1	9.9
20:22:12	12.9	742.0	6.8	302.1	197.9	11.5

POINTS	61	61	61	61	61	39
MEAN	13.7	631.0	7.5	338.4	200.2	6.7
STD. DEV.	1.0	63.1	0.9	82.2	16.9	2.1

SEWAGE SLUDGE - JACKSONVILLE. FL DAY 3 05-02-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
10:36:05						
10:37:08						
10:38:12						
10:39:16						
10:40:20						
10:41:23						
10:42:27						
10:43:31	9.9	1746.0	8.2	522.6	198.8	53.9
10:44:35	10.2	1459.1	8.1	517.8	198.8	53.9
10:45:39	10.3	1511.9	8.0	521.4	198.8	53.9
10:46:43	10.1	1713.5	8.0	540.5	198.8	53.9
10:47:47	10.3	1522.4	7.9	525.1	198.8	53.9
10:48:51	10.6	1377.2	7.7	501.7	198.8	49.0
10:49:54	10.7	1343.6	7.6	496.5	198.8	49.4
10:50:58	11.0	1182.4	7.4	473.6	198.8	35.7
10:52:03	11.1	1183.1	7.4	467.2	198.8	31.5
10:53:08	10.9	1247.7	7.5	479.8	188.1	31.5
10:54:12	11.1	1194.3	7.3	474.9	188.1	31.6
10:55:16	11.1	1177.3	7.3	470.8	188.1	35.8
10:56:20	11.0	1267.3	7.4	480.5	188.1	40.3
10:57:24	10.8	1437.6	7.5	506.2	188.1	40.3
10:58:28	10.7	1438.7	7.6	523.5	188.1	40.4
10:59:32	10.7	1466.9	7.5	524.3	188.1	40.4
11:00:37	10.7	1448.5	7.5	523.7	188.1	44.9
11:01:41	10.7	1442.6	7.5	516.5	198.8	49.5
11:02:45	10.6	1398.2	7.6	523.8	198.8	49.5
11:03:49	10.8	1427.8	7.6	526.0	198.8	58.3
11:04:53	10.5	1623.2	7.5	534.8	198.8	51.3
11:05:56						
11:07:01						
11:08:05						
11:09:09	11.3	1209.6	7.1	442.4	198.7	45.0
11:10:13	11.0	1342.1	7.4	478.2	188.1	49.6
11:11:17	10.8	1513.8	7.5	505.5	177.4	45.0
11:12:20	10.5	1512.5	7.4	504.4	188.0	45.0
11:13:24	10.5	1512.1	7.5	500.1	192.2	40.5
11:14:28	10.5	1512.9	7.6	521.6	189.7	49.6
11:15:32	10.5	1512.0	7.5	517.5	174.9	40.5
11:16:36	10.5	1512.5	7.4	507.2	199.5	27.1
11:17:39	10.5	1512.7	7.3	486.5	174.9	27.1
11:18:43	11.1	1188.7	7.2	475.7	188.0	31.7
11:19:47	11.1	1211.0	7.3	480.4	198.7	35.9
11:20:51	10.9	1305.2	7.5	500.3	202.8	40.5
11:21:56	10.7	1392.9	7.6	521.9	175.7	45.1
11:23:00	10.5	1592.2	7.7	540.1	198.7	58.5
11:24:04	10.7	1425.3	7.5	526.0	188.0	31.7
11:25:09	10.8	1273.7	7.5	507.8	177.3	31.8
11:26:13	10.6	1411.2	7.6	522.8	188.0	54.3
11:27:17	10.3	1735.7	7.8	554.1	192.1	67.8
11:28:21	10.5	1546.4	7.7	537.8	189.6	36.0
11:29:25	10.9	1376.8	7.4	509.8	174.8	45.2

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 3 05-02-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
11:30:29	10.7	1420.7	7.5	508.3	199.5	58.6
11:31:33	10.5	1567.5	7.7	533.1	174.8	49.8
11:32:37	10.5	1469.5	7.7	537.1	188.0	45.2
11:33:41	10.5	1441.3	7.7	536.5	198.7	36.1
11:34:45	10.6	1433.7	7.6	528.4	202.8	36.1
11:35:49	10.7	1410.1	7.5	521.5	175.6	36.1
11:36:54	10.7	1371.8	7.6	515.3	177.3	40.7
11:37:58	10.2	1620.7	7.9	554.9	188.0	58.7
11:39:02	10.2	1676.0	7.9	570.7	192.1	63.3
11:40:06	10.3	1625.3	7.8	554.6	189.6	49.9
11:41:10	10.3	1575.2	7.8	548.4	174.8	31.9
11:42:14	10.4	1564.1	7.8	546.5	199.5	31.9
11:43:18	10.3	1595.5	7.8	554.0	174.8	54.5
11:44:23	10.3	1647.4	7.8	551.4	187.9	99.9
11:45:27	10.0	1823.2	8.0	573.6	208.5	77.2
11:46:31	9.8	2139.9	8.1	598.2	208.5	77.3
11:47:35						
11:48:39						
11:49:44						
11:50:48						
11:51:52						
11:52:56						
11:54:01	10.9	1529.8	7.6	439.7	187.9	58.9
11:55:05	10.5	1482.1	7.6	496.2	187.9	72.8
11:56:09	10.6	1464.4	7.6	499.9	198.6	54.7
11:57:13	10.6	1557.0	7.6	508.4	187.9	54.7
11:58:17	10.7	1457.1	7.6	499.2	187.9	72.8
11:59:21	10.6	1509.8	7.6	498.5	187.9	86.4
12:00:25	10.4	1721.8	7.7	523.0	187.9	95.6
12:01:29	10.2	1747.0	7.8	537.6	187.9	86.4
12:02:34	10.5	1559.3	7.6	514.6	198.6	77.5
12:03:39	10.7	1541.6	7.5	497.3	198.6	68.3
12:04:43	10.7	1498.8	7.5	503.9	208.5	
12:05:48	10.2	1852.3	7.8	534.2	198.6	
12:06:52	9.7	2296.0	8.1	592.2	198.6	
12:07:57	10.0	1880.6	8.0	574.1	198.6	
12:09:01	10.2	1730.2	7.8	542.3	198.6	
12:10:05	10.4	1461.7	7.7	523.6	208.4	
12:11:10	10.4	1451.0	7.8	512.0	198.6	
12:12:14	9.9	2055.7	8.0	564.8	198.5	
12:13:18	10.0	1871.5	8.0	555.3	198.5	
12:14:22	10.4	1495.0	7.7	520.6	198.5	
12:15:26	10.6	1462.6	7.6	504.6	198.5	
12:16:30	10.7	1478.3	7.6	503.0	208.4	
12:17:34	10.9	1209.8	7.4	481.6	219.1	
12:18:39	11.0	1177.8	7.3	468.8	198.5	
12:19:43	11.1	1218.2	7.3	462.8	187.8	
12:20:47	11.1	1237.1	7.2	461.0	187.8	
12:21:51	11.2	1232.6	7.1	457.0	198.5	
12:22:56	11.2	1244.1	7.1	463.7	187.8	
12:24:01	11.5	1158.1	6.9	440.4	177.1	
12:25:05	11.3	1247.3	7.0	452.6	187.8	
12:26:09	11.2	1237.2	7.1	459.6	187.8	
12:27:13	11.1	1337.2	7.2	469.1	187.8	
12:28:17	10.9	1430.0	7.3	486.3	198.5	
12:29:22	11.1	1261.3	7.2	478.5	187.8	

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 3 05-02-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
12:30:26						
12:31:30						
12:32:34						
12:33:38						
12:34:42						
12:35:46						
12:36:50						
12:37:55						
12:38:59						
12:40:04						
12:41:08						
12:42:12						
12:43:16						
12:44:20						
12:45:24	10.5	1699.7	7.6	451.2	177.0	
12:46:28	10.2	1645.7	7.7	496.6	177.0	
12:47:33	10.0	1869.6	7.9	519.8	177.0	
12:48:38	9.8	1992.7	7.9	541.0	177.0	
12:49:43	10.0	1938.0	7.8	534.5	177.0	
12:50:47	10.2	1867.0	7.7	522.4	177.0	
12:51:51	10.2	1897.0	7.7	512.8	187.7	
12:52:56	9.9	2185.1	7.8	538.6	187.7	
12:54:00	10.0	1881.1	7.8	537.1	187.7	
12:55:05	10.2	1837.5	7.8	529.6	187.7	
12:56:09	10.3	1690.1	7.6	514.0	187.7	
12:57:13	10.2	1965.3	7.7	522.5	187.7	
12:58:17	10.0	1943.0	7.8	535.3	187.7	
12:59:21	10.2	1721.6	7.7	523.4	179.4	
13:00:25	10.4	1602.3	7.6	511.6	198.4	
13:01:29	10.4	1602.4	7.6	507.2	198.4	
=====						
POINTS	107	107	107	107	107	67
MEAN	10.6	1525.7	7.6	512.6	191.3	50.3
STD. DEV.	0.4	245.2	0.3	32.2	9.3	16.3

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 3 05-02-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
13:05:13						
13:06:16						
13:07:19						
13:08:22	11.0	1619.6	7.4	424.4	176.9	
13:09:26	10.3	1582.0	7.6	514.1	177.7	
13:10:29	10.3	1718.1	7.6	530.2	171.1	
13:11:33	10.6	1476.1	7.4	514.2	189.3	
13:12:36	10.8	1370.0	7.3	493.7	176.9	
13:13:40	10.7	1394.5	7.4	493.6	176.9	
13:14:43	10.4	1536.6	7.5	512.3	187.6	
13:15:47	10.5	1520.6	7.4	502.3	187.6	
13:16:50	10.6	1474.6	7.5	496.2	191.7	
13:17:54	10.5	1599.5	7.5	506.3	183.5	
13:18:57	10.5	1585.3	7.5	500.8	187.6	
13:20:02	10.6	1482.4	7.4	494.1	190.9	
13:21:06	10.9	1305.8	7.1	471.6	200.0	
13:22:09	11.1	1237.1	7.1	460.0	175.2	
13:23:13	11.0	1322.3	7.2	468.7	187.6	
13:24:17	10.7	1437.2	7.3	494.2	187.6	
13:25:20	10.7	1463.8	7.4	498.3	187.6	
13:26:24	10.9	1284.7	7.2	483.4	191.7	
13:27:28	11.0	1263.8	7.2	476.2	183.4	
13:28:32	11.0	1279.6	7.2	476.8	187.6	
13:29:36	11.1	1252.4	7.1	475.4	190.9	
13:30:39	11.1	1209.1	7.1	474.7	200.0	
13:31:43	10.9	1264.7	7.3	484.7	175.2	
13:32:46	10.8	1304.5	7.3	494.9	198.3	
13:33:50	10.9	1308.1	7.2	492.6	198.3	
13:34:53	10.6	1550.5	7.5	515.0	199.9	
13:35:57	10.4	1610.2	7.5	532.7	198.3	
13:37:01	10.7	1436.7	7.4	510.9	198.3	
13:38:05	10.7	1448.3	7.5	514.7	195.0	
13:39:08	10.3	1785.1	7.7	550.0	208.2	
13:40:12	10.3	1785.1	7.8	578.9	208.2	
13:41:15	10.3	1785.1	7.8	570.7	208.2	
13:42:19	10.3	1785.1	7.8	553.1	208.2	
13:43:22	10.3	1785.1	7.8	560.3	208.2	
13:44:26	10.3	1785.1	7.9	572.2	218.9	
13:45:30	10.3	1785.1	7.8	573.3	218.9	
13:46:33	10.0	2041.4	7.8	567.1	218.9	
13:47:36	9.8	2296.3	7.9	596.2	218.9	
13:48:40	9.7	2261.4	8.0	595.4	208.2	
13:49:43	9.8	2113.4	7.9	581.9	198.2	
13:50:47	10.1	1670.7	7.8	551.8	208.1	
13:51:51	10.2	1637.6	7.8	541.1	198.2	
13:52:54	10.2	1758.6	7.8	544.5	216.4	
13:53:58	10.1	1860.0	7.8	556.9	208.1	
13:55:01	10.3	1638.5	7.7	536.6	198.2	
13:56:05	10.4	1665.1	7.6	525.8	208.1	
13:57:08	10.4	1600.1	7.6	525.2	198.2	
13:58:12	10.4	1570.8	7.6	526.9	216.4	

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 3 05-02-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
13:59:15	10.7	1429.0	7.4	504.6	198.2	
14:00:19						
14:01:22						
14:02:26						
14:03:29						
14:04:33						
14:05:37						
14:06:40	11.4	1408.0	7.2	411.7		
14:07:44	10.9	1342.0	7.3	485.5	176.6	
14:08:48	10.8	1407.4	7.3	497.2	176.6	
14:09:52	10.6	1576.3	7.5	526.4	176.6	
14:10:55	10.8	1435.4	7.4	510.4	187.4	
14:11:59	10.8	1501.2	7.4	506.7	187.4	
14:13:03	10.7	1513.9	7.4	514.9	187.4	
14:14:07	10.6	1629.0	7.5	528.9	187.4	
14:15:11	10.5	1659.5	7.5	535.5	198.1	
14:16:14	10.6	1517.9	7.5	526.9	198.1	
14:17:18	10.7	1449.7	7.5	517.8	198.1	
14:18:22	10.7	1466.2	7.4	515.5	198.1	
14:19:25	10.9	1353.3	7.3	500.5	198.1	
14:20:29	10.8	1459.0	7.4	504.9	198.1	
14:21:33	10.8	1430.3	7.4	508.8	198.1	
14:22:37	10.4	1685.7	7.6	543.8	198.1	
14:23:41	10.5	1563.0	7.6	545.4	198.1	
14:24:44	11.0	1403.2	7.5	518.0	198.1	
14:25:48	10.8	1314.0	7.4	505.8	198.1	
14:26:52	10.6	1527.5	7.6	524.5	198.1	
14:27:55	10.1	1838.6	7.8	567.8	198.1	
14:28:59	10.0	1897.1	7.9	578.4	198.1	
14:30:03	9.8	1915.7	8.0	596.6	198.1	
14:31:07						
14:32:11						
14:33:15						
14:34:19	10.4	1674.5	7.8	459.5	165.7	
14:35:23	10.3	1651.4	7.8	524.5	176.5	
14:36:28	10.4	1530.7	7.8	535.2	176.5	
14:37:31	10.5	1562.6	7.8	544.7	187.3	
14:38:35	10.5	1619.0	7.9	551.3	187.2	
14:39:39	10.5	1774.9	8.0	563.0	187.2	
14:40:42	10.6	1424.2	7.8	544.4	187.2	
14:41:46	10.8	1259.0	7.7	515.8	187.2	
14:42:50	11.0	1419.4	7.8	530.4	187.2	
14:43:53	11.2	1494.0	7.9	543.9	187.2	
14:44:57	11.4	1533.6	8.0	557.8	198.0	
14:46:01	11.6	1751.4	8.2	582.2	198.0	
14:47:05	11.8	1923.4	8.3	607.0	198.0	
14:48:08	12.0	1922.8	8.2	606.7	198.0	
14:49:12	12.1	1575.5	8.0	571.2	198.0	
14:50:16	12.3	1689.3	8.2	576.8	218.7	
14:51:20	12.4	2120.5	8.4	612.9	207.9	
14:52:23	12.4	2170.3	8.4	625.1	198.0	
14:53:27	12.5	1623.0	8.0	564.1	198.0	
14:54:30	12.6	1384.9	7.5	522.3	198.0	
14:55:34	12.8	323.6	0.9	114.7	198.0	
14:56:38	13.3	182.1	0.7	36.4	198.0	
14:57:41	14.5	525.7	3.6	185.3	198.0	

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 3 03-02-87

	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
POINTS	95	95	95	95	94	0
MEAN	10.8	1554.2	7.4	514.4	194.8	0.0
STD.DEV.	0.8	327.0	1.1	83.5	11.5	0.0

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 3 05-02-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
15:58:29	15.8	1761.8	8.0	575.2	197.7	
15:59:33	15.4	1593.8	7.8	560.9	197.7	
16:00:36						
16:01:40						
16:02:44						
16:03:47						
16:04:51						
16:05:55						
16:06:59						
16:08:03						
16:09:06						
16:10:10						
16:11:14						
16:12:18						
16:13:21						
16:14:25						
16:15:29						
16:16:33						
16:17:37						
16:18:40						
16:19:44						
16:20:48						
16:21:52	20.1	1400.3	7.5	481.9	207.6	
16:22:56	19.5	1363.4	7.6	500.0	207.6	
16:24:00	18.7	1438.7	7.7	529.3	186.8	
16:25:04	18.0	1486.1	7.8	538.1	186.8	
16:26:08	17.4	1762.0	7.9	564.6	197.6	
16:27:12	16.8	1721.3	8.0	576.3	197.6	
16:28:16	16.3	1780.1	8.0	588.1	197.6	
16:29:20	16.0	1760.1	8.0	577.1	197.6	
16:30:24	15.7	1923.6	8.0	588.5	197.6	
16:31:28	15.3	1775.3	8.0	586.1	197.6	
16:32:32	15.1	1769.8	6.6	562.3	207.6	
16:33:36						
16:34:40						
16:35:44						
16:36:49						
16:37:53						
16:38:56						
16:40:00						
16:41:04						
16:42:08	18.9	1547.4	7.8	517.3	186.7	
16:43:11	18.2	1685.7	7.8	535.2	186.7	
16:44:15	17.5	1746.5	7.9	551.0	197.6	
16:45:19	16.9	1616.5	7.9	547.6	197.6	
16:46:22	16.4	1625.7	7.9	545.0	197.5	
16:47:26	16.1	1684.5	7.9	554.9	197.5	
16:48:29	15.8	1466.1	7.9	542.0	186.7	
16:49:33	15.5	1462.0	7.8	538.0	186.7	
16:50:37	15.2	1489.1	7.8	542.2	186.7	
16:51:40	15.1	1495.5	7.9	543.1	186.7	
16:52:44	14.9	1710.1	8.0	567.7	186.7	
16:53:48	14.7	1749.2	8.0	571.0	197.5	
16:54:51	14.6	1728.9	8.0	574.4	197.5	
16:55:55	14.5	1737.7	8.0	570.8	197.5	
16:56:59	14.4	1721.2	7.9	568.8	197.5	

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 3 05-02-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
15:04:21	14.5	1197.9	7.4	464.8	176.4	
15:05:24	14.4	1233.4	7.4	473.4	176.4	
15:06:28	14.3	1190.7	7.3	465.6	176.4	
15:07:31	14.3	1190.7	7.2	459.4	176.4	
15:08:34	14.2	1150.1	7.0	446.9	176.4	
15:09:38	14.2	1147.3	6.9	438.6	176.3	
15:10:41	14.2	1180.3	7.2	450.3	187.1	
15:11:45	14.2	1363.6	7.5	488.6	187.1	
15:12:48	14.2	1324.0	7.3	493.4	187.1	
15:13:52	14.1	1260.0	7.3	482.1	187.1	
15:14:55	14.1	1307.3	7.2	483.3	187.1	
15:15:59	14.1	1277.9	7.2	476.7	187.1	
15:17:02	14.1	1448.6	7.3	493.3	187.1	
15:18:06	14.1	1482.3	7.5	514.9	187.1	
15:19:10	14.0	1643.6	7.7	541.2	187.1	
15:20:13	13.9	1854.6	7.8	555.3	187.1	
15:21:17	13.8	1841.4	7.7	558.5	197.9	
15:22:21	13.7	1567.7	7.7	539.0	197.9	
15:23:24	13.7	1706.6	7.8	547.6	197.9	
15:24:28	13.7	1642.8	7.6	533.2	197.9	
15:25:31	13.6	1573.8	7.7	531.9	197.9	
15:26:35	13.6	1629.6	7.7	538.9	197.9	
15:27:39	13.6	1717.7	7.9	555.6	197.9	
15:28:42	13.6	1835.5	8.0	569.5	197.9	
15:29:46	13.5	1854.9	7.9	567.5	206.2	
15:30:50	13.5	1600.7	7.8	553.2	187.9	
15:31:54	13.5	1478.0	7.7	530.4	207.8	
15:32:57	13.5	1465.5	7.7	520.3	191.2	
15:34:01	13.5	1639.5	7.9	544.7	197.8	
15:35:05	13.5	1790.7	7.9	565.3	197.8	
15:36:09	13.5	1648.7	7.8	554.1	206.1	
15:37:13	13.5	1522.1	7.7	537.8	187.8	
15:38:16	13.5	1592.7	7.9	553.9	207.8	
15:39:20						
15:40:24						
15:41:27						
15:42:31						
15:43:35						
15:44:39						
15:45:43						
15:46:46						
15:47:51						
15:48:55						
15:49:59						
15:51:03						
15:52:07	19.4	1602.9	7.7	502.0	197.8	
15:53:11	18.6	1423.2	7.7	510.8	197.8	
15:54:15	17.9	1571.4	7.8	538.1	197.8	
15:55:18	17.2	1877.8	8.0	567.9	218.6	
15:56:22	16.6	1700.0	7.9	569.2	207.7	
15:57:25	16.1	1671.9	8.0	565.5	207.7	

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 3 05-02-87

	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
POINTS	67	67	67	67	67	0
MEAN	15.3	1570.3	7.7	534.0	194.0	0.0
STD. DEV.	1.8	201.4	0.3	38.0	9.1	0.0

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 3 05-02-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
17:03:10	14.0	1528.5	7.8	556.1	154.1	
17:04:13						
17:05:17						
17:06:20						
17:07:23	15.7	1516.0	7.8	454.7	154.1	
17:08:27	15.8	1423.2	7.8	522.1	164.9	
17:09:30	15.5	1509.8	7.8	532.0	164.9	
17:10:34	15.2	1428.9	7.8	527.8	164.9	
17:11:37	15.0	1728.4	8.0	550.8	175.8	
17:12:41	14.8	2066.3	8.2	592.6	186.6	
17:13:44	14.6	2124.4	8.3	617.9	186.6	
17:14:48	14.4	2013.3	8.2	603.0	197.5	
17:15:51	14.4	1606.1	7.9	566.1	186.6	
17:16:55	14.2	1745.6	8.0	562.7	186.6	
17:17:58	14.1	1784.0	8.1	578.0	197.4	
17:19:02	14.1	1677.4	8.0	566.1	197.4	
17:20:06	14.0	1637.7	7.9	555.1	189.9	
17:21:10	13.9	1914.5	8.1	569.7	197.4	
17:22:13	13.8	2015.2	8.1	583.7	197.4	
17:23:17	13.7	1667.8	7.9	557.6	207.5	
17:24:20	13.7	1999.2	8.0	574.9	207.4	
17:25:24	13.7	2055.6	8.3	595.0	207.4	
17:26:28	13.6	1922.5	8.3	588.5	197.4	
17:27:31	13.6	1713.4	8.1	558.6	197.4	
17:28:35	13.6	1561.4	8.0	534.2	197.4	
17:29:39	13.5	1518.8	8.0	527.0	197.4	
17:30:42	13.5	1484.7	8.0	520.9	197.4	
17:31:46						
17:32:50						
17:33:54						
17:34:58	15.8	1670.2	8.0	457.7	175.6	
17:36:01	15.8	1470.9	7.9	526.1	175.6	
17:37:05	15.5	1211.7	7.6	505.3	175.6	
17:38:09	15.2	1204.3	7.6	494.8	175.6	
17:39:12	15.1	1338.4	7.7	500.4	175.6	
17:40:16	14.9	1302.3	7.8	507.6	186.5	
17:41:20	14.8	1400.7	7.8	512.2	186.5	
17:42:24	14.6	1351.6	7.7	516.8	186.5	
17:43:27	14.5	1425.1	7.7	506.8	186.5	
17:44:31	14.5	1189.7	7.4	472.6	186.5	
17:45:35	14.4	1189.4	7.5	468.9	186.5	
17:46:39	14.4	1252.9	7.6	476.7	186.4	
17:47:43	14.4	1259.3	7.4	478.0	186.4	
17:48:47	14.4	1302.0	7.5	483.1	186.4	
17:49:51	14.3	1341.8	7.6	499.3	197.3	
17:50:55	14.3	1539.6	7.9	525.0	197.3	
17:51:59	14.3	1579.5	7.8	538.2	197.3	
17:53:02	14.2	1454.7	D-36 7.8	522.0	197.3	
17:54:06	14.1	1459.7	7.9	524.4	197.3	
17:55:09	14.0	1460.1	7.7	514.4	197.3	

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 3 05-02-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
17:57:17	14.0	1646.7	7.9	525.6	197.3	
17:58:20	13.9	1674.6	8.0	541.5	197.3	
17:59:24	13.9	1779.0	8.1	547.1	197.3	
18:00:28						
18:01:31						
18:02:35						
18:03:39						
18:04:43	16.2	1465.5	7.9	426.5	164.6	
18:05:46	16.1	1401.7	7.9	481.2	164.6	
18:06:50	15.7	1498.8	7.9	492.6	164.6	
18:07:54	15.4	1503.7	7.9	504.5	164.6	
18:08:57	15.2	1228.7	7.7	480.9	164.6	
18:10:01	15.0	1235.1	7.6	457.8	164.6	
18:11:05	14.8	1235.1	7.6	450.6	175.4	
18:12:09	14.8	1333.9	7.8	460.6	175.4	
18:13:13	14.7	1369.6	7.9	470.8	175.4	
18:14:16	14.6	1369.3	7.9	474.1	175.4	
18:15:20	14.5	1366.5	7.9	478.7	175.4	
18:16:24	14.4	1384.9	7.9	472.9	175.4	
18:17:27	14.4	1455.9	8.0	476.2	186.3	
18:18:31	14.3	1535.3	8.2	492.8	186.3	
18:19:35	14.3	1255.9	7.9	471.8	175.4	
18:20:39	14.2	1296.9	7.9	450.9	175.4	
18:21:43	14.2	1481.1	8.0	471.8	175.4	
18:22:47	14.2	1711.6	8.1	485.7	175.4	
18:23:51	14.1	1338.3	8.0	479.2	164.5	
18:24:54	14.1	1036.6	7.5	429.0	175.4	
18:25:58	14.1	1019.7	7.1	391.1	175.4	
18:27:02	14.2	1090.3	7.2	388.6	175.4	
18:28:06	14.3	1090.0	7.2	399.3	175.4	
18:29:10	14.4	1085.8	7.1	409.5	175.4	
18:30:15	14.4	1086.2	7.1	416.4	175.3	
18:31:18	14.5	1100.0	7.0	423.8	175.3	
18:32:22	14.5	1096.5	6.8	412.8	175.3	
18:33:26	14.6	1125.1	6.7	409.5	175.3	
18:34:31	14.6	1164.7	6.5	392.0	175.3	
18:35:35	14.7	1207.8	6.7	409.2	175.3	
18:36:38	14.7	1164.8	6.2	403.9	175.3	
18:37:42						
18:38:46						
18:39:49						
18:40:53			7.0	444.9	164.4	
18:41:57			7.1	455.6	164.4	
18:43:01			7.1	459.9	164.4	
18:44:04	15.7	1194.3	7.2	461.8	164.4	
18:45:08	15.5	1219.5	7.6	490.8	164.4	
18:46:11	15.3	1320.9	7.8	512.6	175.3	
18:47:15	15.2	1501.0	7.9	538.6	175.3	
18:48:18	15.0	1380.6	7.8	531.2	175.3	
18:49:22	14.9	1243.3	7.4	492.0	175.2	
18:50:26	14.8	1283.2	7.4	473.7	175.2	
18:51:30	14.9	1353.6	7.5	486.6	175.2	
18:52:33	14.5	1346.6	7.7	499.3	175.2	
18:53:37	14.4	1406.3	7.9	518.2	186.1	
18:54:41	14.2	1440.6	8.1	537.9	197.1	
18:55:44	13.6	1469.6	8.2	559.0	207.1	

SEWAGE SLUDGE - JACKSONVILLE. FL DAY 3 05-02-87

	O2	CO	CO2	SO2	NOX	THC
	(%V)	(PPMV)	(%V)	(PPMV)	(PPMV)	(PPMV)
POINTS	94	94	94	94	94	0
MEAN	14.6	1438.9	7.7	498.7	181.6	0.0
STD.DEV.	0.7	253.2	0.4	53.1	13.0	0.0

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 3 05-02-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
19:03:08						
19:04:11	12.9	1734.7	8.2	386.9	164.3	132.1
19:05:14	12.9	1845.7	8.6	575.1	164.3	76.2
19:06:17	12.9	1308.3	7.7	529.7	175.2	61.1
19:07:21	12.8	1388.6	6.8	465.3	175.2	20.2
19:08:24	12.9	1508.4	6.5	432.9	164.3	25.4
19:09:28	12.9	1557.6	6.5	425.7	164.3	30.6
19:10:31	12.8	1584.5	6.4	423.4	164.3	30.6
19:11:35	12.9	1668.7	6.3	427.0	164.2	30.6
19:12:38	13.0	1730.2	6.4	426.3	164.2	35.8
19:13:42	13.1	1780.5	6.2	423.7	153.3	40.6
19:14:45	13.3	1817.6	5.9	406.5	153.3	40.6
19:15:48	13.4	1818.4	5.8	399.9	153.3	40.6
19:16:52	13.6	1805.4	5.8	397.1	153.3	45.8
19:17:56	13.7	1798.7	5.9	403.5	153.3	45.8
19:19:00	13.7	1779.7	5.9	411.7	143.2	45.8
19:20:04	13.9	1840.9	5.9	412.9	143.2	45.8
19:21:07	14.0	1807.8	6.2	419.0	143.2	40.7
19:22:11	14.0	1719.1	6.3	433.0	143.2	45.9
19:23:14	14.0	1597.5	6.6	456.8	143.2	45.9
19:24:18	13.7	1462.1	7.1	491.3	143.2	40.7
19:25:21	13.6	1444.9	7.6	526.2	143.1	40.7
19:26:25	13.4	1452.3	7.5	542.4	143.1	40.7
19:27:29	13.2	1439.7	7.4	538.2	143.1	40.7
19:28:32	13.0	1526.3	7.7	562.7	143.1	66.3
19:29:36	12.9	2078.5	8.0	640.1	143.1	76.7
19:30:40	12.8	1559.3	5.8	512.9	143.1	46.0
19:31:43						
19:32:47						
19:33:51						
19:34:55	13.8	1470.1	6.7	477.6	143.1	40.8
19:35:59	13.7	1515.7	6.5	475.8	143.1	40.8
19:37:02	13.7	1517.9	6.6	488.4	143.1	40.9
19:38:06	13.8	1529.3	6.6	490.4	153.2	40.9
19:39:10	13.8	1539.6	6.8	508.5	153.1	40.9
19:40:13	13.9	1552.0	6.7	519.5	153.1	40.9
19:41:17	13.8	1540.8	6.4	499.2	153.1	40.9
19:42:21	12.7	1538.7	6.3	477.9	153.1	40.9
19:43:25	12.7	1516.8	6.2	470.3	164.1	40.9
19:44:29	12.7	1537.7	5.9	459.2	164.1	41.0
19:45:32	12.8	1640.8	5.4	427.5	164.0	41.0
19:46:37	13.0	1682.2	5.3	402.6	164.0	41.0
19:47:41	13.2	1689.7	5.4	403.6	175.0	41.0
19:48:45	13.4	1666.8	5.6	416.5	185.9	41.0
19:49:49	13.6	1656.2	5.7	435.7	185.9	41.0
19:50:53	13.7	1672.2	5.7	428.4	185.9	41.0
19:51:57	13.9	1725.4	5.8	429.4	185.9	20.5
19:53:00	14.0	1724.7	6.0	442.2	196.8	36.2
19:54:04	14.0	1733.3	6.1	444.5	196.8	36.2
19:55:07	14.1	1708.5	6.8	480.6	196.8	36.3
19:56	-	1619.7	6.9	531.6	196.8	36.3

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 3 05-02-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
19:57:15	13.7	1522.4	7.4	548.1	174.9	36.3
19:58:18	13.7	1449.9	7.9	610.6	174.9	36.3
19:59:22	13.5	1430.1	8.0	618.2	174.9	36.3
20:00:26	13.3	1349.1	7.9	637.7	174.9	36.3
20:01:29						
20:02:33						
20:03:37	13.7	1031.6	8.1	472.3	153.0	36.3
20:04:41	14.0	1205.8	9.0	689.1	153.0	31.1
20:05:44	13.7	1220.0	9.1	711.7	153.0	25.9
20:06:48	13.5	1190.0	9.0	712.6	153.0	31.1
20:07:52	13.0	1144.3	8.9	698.5	153.0	31.1
20:08:56	12.8	1150.4	8.5	668.6	153.0	31.1
20:09:59	12.6	1185.8	8.3	634.6	153.0	31.2
20:11:03	12.7	1250.0	8.2	622.7	163.9	31.2
20:12:07	11.2	1255.0	7.6	580.2	163.9	31.2
20:13:11	11.1	1276.6	7.2	535.7	163.9	31.2
20:14:14	11.5	1283.4	7.0	511.1	163.9	15.4
20:15:18	11.6	1268.9	6.9	501.1	163.9	20.7
20:16:22	11.6	1255.2	6.8	490.3	163.9	25.9
20:17:25	11.6	1253.4	6.9	495.5	163.9	26.0
20:18:29	11.7	1280.8	6.8	494.0	174.8	26.0
20:19:33	12.0	1330.4	6.5	472.1	174.8	26.0
20:20:37	12.3	1367.3	6.3	452.8	174.8	26.0
20:21:41	12.4	1423.0	6.2	442.0	174.8	26.0
20:22:45	12.8	1493.9	5.8	427.5	174.8	26.0
20:23:49	12.8	1543.9	5.6	405.7	174.8	26.0
20:24:53	12.7	1587.6	5.6	405.7	174.8	26.0
20:25:57	12.9	1659.9	5.5	397.8	185.7	26.0
20:27:01	13.0	1707.5	5.4	392.6	185.7	31.3
20:28:04	13.4	1803.6	5.2	379.4	196.7	26.0
20:29:08	13.4	1888.4	5.1	381.8	196.7	31.3
20:30:13	13.1	1939.8	5.2	371.5	196.7	31.4
20:31:16						
20:32:20						
20:33:24						
20:34:29						
20:35:33						
20:36:37	12.3	1958.7	6.2	393.7	206.8	31.4
20:37:40	12.3	1958.7	6.3	413.7	206.8	31.4
20:38:44	12.3	1958.7	6.4	426.2	206.8	31.4
20:39:48	12.9	1958.7	6.6	441.0	206.8	31.4
20:40:51	12.7	1958.7	6.6	451.6	206.8	31.5
20:41:55	12.8	1958.7	6.7	460.9	206.8	31.5
20:42:59	12.2	1958.7	6.8	468.8	196.6	31.5
20:44:02	11.7	1854.2	6.8	477.9	196.6	31.5
20:45:06	11.6	1817.4	7.1	504.3	196.6	31.5
20:46:09	11.4	1757.1	7.4	526.8	196.6	26.2
20:47:13	11.4	1709.7	7.4	530.6	196.6	26.2
20:48:16	11.2	1697.0	7.5	532.1	196.6	26.2
20:49:20	10.9	1699.9	7.6	538.2	196.6	26.2
20:50:24	10.7	1690.3	7.7	541.4	196.6	26.2
20:51:28	10.6	1692.2	7.7	543.6	196.6	26.2
20:52:32	10.3	1679.5	7.9	560.2	196.6	26.2
20:53:35	10.3	1651.1	7.9	562.4	196.6	26.2
20:54:39	10.5	1675.3	7.7	549.8	196.6	26.3
20:55:43	10.4	1649.1	7.9	556.1	196.6	26.3

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 3 05-02-87

	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
POINTS	96	96	96	96	96	96
MEAN	12.8	1589.4	6.8	489.8	171.3	36.1
STD.DEV.	1.0	223.6	1.0	80.9	20.5	14.2

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 3 05-02-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
21:03:19	10.5	1608.3	7.9	490.1	174.6	26.3
21:04:22	10.3	1601.6	7.9	542.5	185.6	26.3
21:05:26	10.1	1539.2	8.0	559.5	185.6	26.3
21:06:29	10.1	1519.8	7.9	562.7	185.6	26.3
21:07:32	10.5	1520.9	7.8	547.7	185.6	26.3
21:08:36	10.7	1530.9	7.5	531.0	185.6	26.3
21:09:39	10.9	1610.1	7.2	507.9	185.6	26.3
21:10:43	11.3	1652.4	6.8	484.2	185.6	26.3
21:11:46	11.9	1771.0	6.3	435.0	185.6	26.3
21:12:50	12.3	1856.9	6.0	401.8	185.6	26.3
21:13:53	12.3	1948.9	6.0	393.9	196.5	26.4
21:14:57	12.2	2004.7	6.1	394.3	196.5	26.4
21:16:00	12.0	1981.0	6.2	408.6	196.5	26.4
21:17:04	12.0	2013.7	6.2	411.4	206.7	26.4
21:18:08	11.8	2000.7	6.4	422.9	206.7	26.4
21:19:11	11.7	2009.3	6.5	439.5	206.7	26.4
21:20:15	11.6	2007.6	6.6	447.4	206.7	26.4
21:21:19	11.5	1991.0	6.7	458.3	206.7	26.4
21:22:22	11.4	1997.8	6.8	469.7	206.7	26.4
21:23:26	11.1	1976.2	6.9	489.1	206.7	26.4
21:24:29	10.9	1889.6	7.2	517.5	196.5	26.4
21:25:33	10.8	1871.2	7.4	532.5	196.5	26.4
21:26:36	10.6	1833.3	7.6	546.4	196.5	26.5
21:27:41	10.4	1806.7	7.9	560.4	174.5	26.5
21:28:44	9.5	1771.6	8.4	643.5	174.5	26.5
21:29:48	9.8	1701.0	8.2	624.0	174.5	26.5
21:30:52	10.2	1650.2	7.9	603.6	174.5	26.5
21:31:55	10.1	1592.0	8.1	597.3	174.5	26.5
21:32:59	10.1	1543.1	7.8	597.9	174.5	26.5
21:34:03						
21:35:07						
21:36:11						
21:37:15	10.2	1521.3	8.2	519.5	152.4	26.5
21:38:18	9.9	1521.3	8.2	585.0	152.4	26.6
21:39:22	9.8	1509.9	8.4	596.5	152.4	26.6
21:40:26	9.5	1487.4	8.4	611.2	152.4	21.2
21:41:29	9.5	1480.4	8.3	607.6	152.4	21.2
21:42:33	9.5	1488.8	8.4	612.4	152.4	21.2
21:43:37	9.5	1482.5	8.3	601.7	152.4	21.2
21:44:41	10.1	1361.3	8.1	582.0	152.4	21.2
21:45:44	10.1	1333.7	8.2	584.1	175.2	21.2
21:46:49	10.0	1262.3	8.2	595.6	174.4	21.2
21:47:53	10.2	1261.6	8.0	579.1	174.4	21.2
21:48:57	10.2	1303.2	8.0	575.4	185.4	21.2
21:50:01	10.4	1311.8	7.9	566.5	185.4	21.2
21:51:05	10.4	1297.6	7.9	558.3	185.4	21.2
21:52:09	10.4	1273.8	7.9	559.4	185.4	21.3
21:53:13	10.7	1234.8	7.7	543.6	185.4	21.3
21:54:16	10.9	1236.2	7.4	525.6	185.4	21.3
21:55:19	10.9	1217.4	7.4	514.4	185.4	21.3
21:56:23	10.9	1208.9	7.5	518.7	185.4	21.3

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 3 05-02-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
21:57:27	10.8	1212.2	7.5	526.9	185.3	21.3
21:58:30	10.7	1178.8	7.7	530.7	185.3	21.3
21:59:34	11.0	1130.8	6.9	508.0	185.3	21.3
22:00:38						
22:01:41						
22:02:45						
22:03:49	10.7	1173.3	7.7	531.5	185.3	21.3
22:04:53	10.6	1163.0	7.8	553.4	185.3	21.3
22:05:57	10.8	1146.0	7.5	541.7	185.3	21.3
22:07:00	11.0	1135.3	7.4	524.3	185.3	21.4
22:08:04	10.9	1132.5	7.5	523.6	185.3	21.4
22:09:08	10.8	1120.8	7.6	541.5	185.3	21.4
22:10:12	10.8	1102.7	7.6	548.1	185.3	21.4
22:11:15	10.9	1118.1	7.7	545.7	196.3	21.4
22:12:19	10.7	1116.0	7.7	552.2	196.3	21.4
22:13:23	10.9	1124.2	7.5	544.2	196.3	21.4
22:14:27	11.0	1140.9	7.3	524.6	196.3	21.4
22:15:31	11.0	1161.6	7.4	524.6	196.3	21.4
22:16:34	10.9	1166.3	7.5	536.2	196.3	21.4
22:17:38	11.1	1140.3	7.1	516.2	196.3	21.4
22:18:42	11.1	1141.4	7.2	514.6	196.3	21.4
22:19:46	11.1	1141.1	7.2	515.3	196.3	21.4
22:20:50	11.1	1126.9	7.4	524.2	196.3	21.4
22:21:54	11.0	1105.6	7.4	524.4	196.3	21.5
22:22:58	11.0	1090.0	7.5	532.1	196.3	21.5
22:24:02	11.0	1092.9	7.4	532.3	196.3	21.5
22:25:06	11.1	1070.8	7.2	513.5	196.2	21.5
22:26:10	11.2	1079.0	7.2	511.0	196.2	21.5
22:27:14	11.0	1050.2	7.6	528.7	196.2	21.5
22:28:18	10.9	1061.0	7.6	534.7	196.2	21.5
22:29:21	11.0	1056.0	7.4	526.7	196.2	21.5
22:30:26						
22:31:30						
22:32:33						
22:33:37	12.3	1034.1	7.0	398.5	196.2	21.5
22:34:42	11.3	1082.5	7.1	468.7	196.2	21.5
22:35:46	11.4	1076.5	6.9	464.5	196.2	21.5
22:36:50	11.6	1087.2	6.9	452.9	196.2	21.6
22:37:54	11.7	1092.6	6.8	451.4	196.2	21.6
22:38:57	11.7	1124.3	6.8	446.4	196.2	21.6
22:40:01	11.6	1132.2	6.8	452.8	196.2	21.6
22:41:05	11.6	1129.7	6.8	452.8	196.2	21.6
22:42:08	11.4	1101.3	7.0	475.3	196.2	21.6
22:43:12	11.2	1105.9	7.1	488.4	196.2	21.6
22:44:15	11.0	1102.8	7.3	509.4	196.2	21.6
22:45:19	11.1	1076.8	7.1	505.2	196.2	21.6
22:46:22	11.2	1100.3	7.2	493.5	196.2	21.6
22:47:26	11.1	1100.7	7.1	497.2	196.2	21.6
22:48:29	11.4	1101.1	7.0	479.3	196.2	21.6
22:49:33	11.5	1129.3	6.9	473.5	196.1	21.6
22:50:37	11.3	1120.1	7.0	478.2	196.1	21.7
22:51:41	11.3	1125.5	7.1	488.1	196.1	21.7
22:52:45	11.2	1112.7	7.1	487.1	196.1	21.7
22:53:48	11.0	1120.9	7.5	506.4	196.1	21.7
22:54:52	10.9	1157.6	7.4	523.8	196.1	21.7
22:55:56	11.1	1108.1	7.1	499.4	196.1	21.7

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 3 05-02-87

	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
POINTS	98	98	98	98	98	98
MEAN	10.9	1359.3	7.4	518.2	188.2	23.1
STD. DEV.	0.6	311.0	0.6	54.5	13.4	2.3

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 3 05-02-67

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
23:03:17						
23:04:20	11.8	1120.6	7.0	448.0	185.1	21.7
23:05:24	11.1	1148.4	7.2	520.8	185.1	21.7
23:06:27	11.0	1140.2	7.5	525.7	185.1	21.7
23:07:30	11.0	1147.0	7.5	514.6	185.1	21.7
23:08:34	10.9	1146.3	7.6	516.3	185.1	21.7
23:09:37	10.8	1128.5	7.7	523.0	185.1	21.7
23:10:41	10.8	1111.7	7.7	524.2	185.1	21.7
23:11:44	10.6	1163.4	8.0	539.8	185.1	21.7
23:12:48	10.5	1141.6	8.0	554.8	185.1	21.7
23:13:51	10.4	1122.4	8.0	550.9	185.1	21.7
23:14:55	10.4	1106.4	8.1	563.0	185.1	21.7
23:15:58	10.6	1100.7	7.9	561.2	185.1	21.7
23:17:02	10.6	1101.4	8.0	555.4	196.1	21.7
23:18:06	10.7	1095.0	7.8	544.4	196.1	21.7
23:19:10	10.8	1108.5	7.8	535.6	196.1	21.7
23:20:13	10.8	1096.7	7.8	536.8	196.1	21.7
23:21:17	10.6	1113.5	8.0	553.0	185.1	21.7
23:22:20	10.3	1087.1	8.2	553.5	185.1	21.7
23:23:24	10.3	1080.3	8.1	553.3	185.1	21.7
23:24:28	10.3	1072.1	8.1	547.3	185.1	21.7
=====						
POINTS	20	20	20	20	20	20
MEAN	10.7	1116.6	7.8	536.1	187.3	21.7
STD. DEV.	0.3	24.6	0.3	25.1	4.4	0.0

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 4 05-03-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
12:09:32						
12:10:36						
12:11:40						
12:12:45						
12:13:49	11.1	810.5	7.6	486.9		
12:14:53	11.3	786.6	7.4	474.8		
12:15:57	11.3	801.7	7.4	467.4	92.1	
12:17:02	11.5	831.3	7.3	456.8	127.3	
12:18:07	11.5	848.5	7.3	460.1	139.1	
12:19:11	11.4	882.0	7.3	462.2	150.0	
12:20:16	11.4	876.3	7.4	466.5	161.7	
12:21:21	11.5	836.1	7.3	455.8	161.8	
12:22:25	11.4	821.0	7.4	431.6	161.8	
12:23:30	11.3	826.5	7.6	422.8	161.8	
12:24:34	11.2	850.0	7.6	423.9	161.8	
12:25:40	11.3	861.5	7.5	425.1	161.9	
12:26:45	11.4	957.7	7.4	417.2	161.9	
12:27:50	11.2	851.8	7.6	447.9	161.9	
12:28:54	11.3	841.8	7.5	442.1	161.9	
12:29:59	11.1	888.6	7.7	451.1	185.5	
12:31:04	11.0	882.9	7.7	460.1	162.0	
12:32:09	11.2	864.8	7.6	445.8	162.0	
12:33:14	11.3	896.8	7.5	441.6	162.0	
12:34:19	11.2	883.2	7.7	461.9	162.1	
12:35:24	11.2	854.8	7.6	464.9	162.1	
12:36:29	11.2	847.6	7.7	464.5	162.1	
12:37:33	11.0	868.1	7.7	477.3	162.1	
12:38:38	11.2	826.7	7.6	468.6	162.1	
12:39:43	11.3	844.8	7.5	458.8	162.2	
12:40:48	11.3	861.7	7.6	456.9	162.2	
12:41:52	11.2	854.5	7.6	466.8	174.0	
12:42:57	11.5	866.6	7.3	446.4	174.0	
12:44:02	11.5	888.0	7.3	440.1	174.1	
12:45:06	11.4	856.6	7.5	458.3	174.1	
12:46:11	11.3	859.4	7.5	463.2	174.1	
12:47:15	11.4	850.3	7.4	456.5	174.1	
12:48:20	11.3	863.9	7.5	461.1	174.2	
12:49:25	11.2	885.4	7.6	463.6	174.2	
12:50:29	11.3	848.8	7.5	466.2	174.2	
12:51:33	11.2	876.8	7.7	476.6	174.2	
12:52:38	11.0	875.3	7.9	502.6	174.3	
12:53:42	11.0	845.1	7.8	499.5	162.5	
12:54:47	11.0	844.8	7.9	496.1	162.5	
12:55:52	10.9	856.0	7.9	509.0	162.5	
12:56:57	11.0	813.7	7.8	494.5	162.6	
12:58:02	11.1	856.6	7.8	487.5	174.4	
12:59:07	10.7	916.4	8.1	513.9	174.4	
13:00:12	11.1	862.9	7.2	489.8	174.5	
13:01:17						
13:02:22						
13:03:26						

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 4 05-03-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
13:04:30	11.3	915.1	7.6	465.6	174.6	
13:05:34	11.2	908.5	7.6	489.0	174.6	
13:06:38	11.2	862.0	7.6	485.8	174.6	
13:07:43	11.3	836.4	7.5	469.7	174.6	
13:08:48	11.3	867.7	7.5	467.4	174.7	
13:09:53	11.6	865.3	7.3	461.0	174.7	
13:10:58	11.5	868.7	7.4	462.5	174.7	
13:12:03	11.7	842.4	7.1	451.1	174.7	
13:13:07	11.8	839.7	7.0	434.9	174.8	
13:14:12	11.7	835.7	7.1	442.6	174.8	
13:15:17	11.4	840.9	7.4	460.3	174.8	
13:16:22	11.3	859.6	7.5	473.6	174.9	
13:17:27	11.6	858.7	7.2	454.2	174.9	
13:18:32	11.9	825.2	6.9	433.2	174.9	
13:19:37	12.0	855.7	6.8	419.7	174.9	
13:20:42	11.8	824.0	7.1	440.2	175.0	
13:21:47	11.8	811.6	7.1	445.4	175.0	
13:22:52	11.4	814.9	7.5	470.5	175.0	
13:23:56	11.4	817.6	7.4	477.2	175.0	
13:25:01	11.7	804.0	7.1	456.1	175.1	
13:26:06	11.5	825.5	7.4	468.5	175.1	
13:27:11	11.1	912.4	7.7	503.9	175.1	
13:28:16	11.0	943.8	7.7	518.1	175.1	
13:29:21	11.3	865.9	7.4	489.3	175.2	
13:30:26	11.4	892.2	7.1	468.0	175.2	
13:31:30						
13:32:35						
13:33:39						
13:34:43	12.0	888.5	6.8	404.2	175.3	
13:35:48	11.9	882.8	6.8	420.6	175.3	
13:36:52	11.9	871.0	6.8	424.3	175.4	
13:37:58	11.9	868.3	6.8	426.1	175.4	
13:39:03	11.8	869.8	7.0	430.1	175.4	
13:40:08	11.7	877.7	7.1	444.2	175.4	
13:41:13	11.6	882.2	7.2	457.5	175.5	
13:42:19	11.5	877.4	7.3	464.1	175.5	
13:43:24	11.2	894.3	7.6	482.6	175.5	
13:44:29	11.0	886.1	7.8	507.0	175.5	
13:45:33	11.2	887.1	7.5	490.8	175.6	
13:46:38	11.2	887.0	7.4	468.8	175.6	
13:47:43	11.2	887.0	7.7	495.6	175.6	
13:48:48	11.2	887.1	7.7	499.8	175.6	
13:49:53	11.2	887.7	7.6	489.9	175.7	
13:50:58	11.2	887.4	7.6	484.2	175.7	
13:52:03	11.4	918.9	7.3	467.6	175.7	
13:53:08	11.7	939.9	7.1	450.9	175.8	
13:54:13	11.3	935.0	7.4	470.0	175.8	
13:55:18	11.2	910.0	7.6	486.0	163.9	
13:56:23	11.0	921.4	7.8	504.8	163.9	
13:57:28	10.8	959.8	7.9	524.6	163.9	
13:58:33	10.8	941.4	7.9	528.3	175.9	
13:59:38	10.9	926.3	7.8	517.3	175.9	

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POINTS	93	93	93	93	91	0
MEAN	11.3	866.5	7.5	465.9	169.4	0.0

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 4 05-03-87

STD.DEV.	0.3	35.4	0.3	26.2	11.7	0.0

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 4 05-03-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
14:04:04	11.0	909.3	7.8	509.5	187.8	
14:05:07	10.7	892.1	8.0	531.8	187.9	
14:06:11	10.9	910.9	7.8	525.4	182.4	
14:07:15	10.9	904.2	7.8	524.7	182.5	
14:08:19	11.1	890.0	7.6	512.3	182.5	
14:09:23	11.2	911.5	7.6	499.8	182.6	
14:10:27	11.2	914.8	7.6	503.6	182.6	
14:11:32	11.0	915.7	7.8	519.2	182.6	
14:12:36	10.9	926.2	7.9	534.6	188.2	
14:13:40	10.7	970.3	8.1	553.5	188.3	
14:14:44	10.7	948.3	8.0	550.8	188.3	
14:15:49	10.9	897.3	7.8	527.5	188.3	
14:16:53	10.9	914.5	7.8	526.6	188.4	
14:17:57	11.0	874.3	7.8	519.4	188.4	
14:19:02	11.1	884.9	7.7	514.4	188.5	
14:20:06	11.1	917.2	7.6	496.1	188.5	
14:21:11	11.2	902.7	7.6	489.8	176.6	
14:22:15	11.4	853.2	7.4	477.5	176.6	
14:23:19	11.6	848.6	7.2	457.3	176.7	
14:24:23	11.7	840.8	7.1	455.8	176.7	
14:25:28	11.5	848.3	7.3	463.7	188.8	
14:26:32	11.9	858.9	6.9	440.3	188.8	
14:27:36	12.0	883.3	6.7	424.9	188.8	
14:28:41	11.9	892.7	6.8	432.7	188.9	
14:29:45	11.9	888.2	6.7	437.9	188.9	
14:30:50	11.9	884.5	6.9	438.7	189.0	
14:31:54	11.8	977.9	6.9	446.8	189.0	
14:32:58	11.5	901.8	7.3	466.6	189.1	
14:34:03	11.5	893.9	7.3	474.7	224.2	
14:35:08	11.3	923.8	7.4	487.1	177.1	
14:36:12						
14:37:16						
14:38:20						
14:39:24	11.4	883.3	7.3	454.3	166.2	
14:40:27	11.1	934.9	7.5	483.9	177.4	
14:41:31	11.0	926.2	7.6	495.0	165.4	
14:42:36	10.8	938.8	7.8	517.4	165.4	
14:43:41	10.9	910.8	7.7	511.4	165.4	
14:44:45	10.9	933.5	7.8	510.3	165.5	
14:45:50	10.9	969.4	7.7	508.4	165.5	
14:46:54	10.8	997.8	7.8	515.0	177.6	
14:47:59	11.0	927.1	7.5	497.2	177.7	
14:49:04	11.2	887.8	7.4	478.8	177.7	
14:50:09	11.3	862.5	7.3	464.3	177.7	
14:51:14	11.2	852.2	7.5	473.0	177.8	
14:52:18	11.0	886.9	7.6	484.9	177.8	
14:53:23	11.2	867.0	7.4	477.0	177.9	
14:54:27	11.3	856.7	7.4	465.7	177.9	
14:55:31	11.3	846.1	7.3	462.4	178.0	
14:56:35	11.3	846.1	7.4	466.0	178.0	
14:57:40	11.0	865.2	7.7	491.5	178.1	

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 4 05-03-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
14:58:44	11.6	857.9	7.8	503.5	178.1	
14:59:48	11.0	905.9	7.6	500.1	178.1	
15:00:53	11.5	817.1	7.3	460.4	178.2	
15:01:57	11.6	802.6	7.1	446.4	178.2	
15:03:01	11.7	814.4	7.1	442.6	178.3	
15:04:07	11.5	819.8	7.2	451.3	178.3	
15:05:11	11.4	839.5	7.4	464.5	178.4	
15:06:16	11.7	815.9	7.0	449.5	178.4	
15:07:20	11.8	827.4	6.9	430.6	178.4	
15:08:24	11.5	856.1	7.3	457.0	178.5	
15:09:29	11.3	851.5	7.4	469.5	178.5	
15:10:33	11.2	848.2	7.5	482.6	178.6	
15:11:38	11.4	816.2	7.3	468.8	178.6	
15:12:42	11.6	807.4	7.2	455.9	178.7	
15:13:47	11.5	836.7	7.3	460.2	178.7	

POINTS	63	63	63	63	63	0
MEAN	11.3	884.6	7.4	483.2	181.0	0.0
STD.DEV.	0.3	45.0	0.3	31.4	8.6	0.0

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 4 05-03-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
15:50:21	11.4	806.5	7.3	465.5	178.7	
15:51:24	11.2	817.1	7.5	475.9	178.7	
15:52:28	11.0	885.1	7.7	502.6	178.8	
15:53:32	10.9	857.3	7.8	511.2	178.8	
15:54:36	11.1	853.6	7.6	500.2	178.8	
15:55:40	11.4	813.2	7.3	467.6	178.8	
15:56:45	11.6	806.5	7.2	451.4	178.8	
15:57:49	11.4	823.4	7.4	462.2	178.9	
15:58:54	11.4	857.3	7.3	462.1	178.9	
15:59:58	11.5	828.0	7.2	459.0	178.9	
16:01:03	11.6	830.1	7.1	452.5	178.9	
16:02:07						
16:03:11						
16:04:14						
16:05:18						
16:06:22	11.5	828.0	7.3	441.9	191.2	
16:07:26	11.4	841.5	7.3	455.7	191.2	
16:08:31	11.4	859.4	7.3	463.8	191.3	
16:09:35	11.5	856.7	7.2	460.1	191.3	
16:10:39	11.6	863.0	7.3	457.2	191.3	
16:11:44	11.3	837.6	7.4	474.0	191.3	
16:12:48	11.5	851.5	7.2	462.9	191.4	
16:13:53	11.4	862.4	7.4	469.2	191.4	
16:14:58	11.1	866.9	7.6	491.7	179.3	
16:16:02	10.9	852.4	7.8	510.5	179.3	
16:17:07	10.7	915.9	8.0	533.5	179.3	
16:18:11	10.9	842.1	7.7	516.6	191.5	
16:19:16	11.0	856.6	7.8	515.2	191.5	
16:20:21	10.8	861.2	7.8	526.5	191.6	
16:21:26	11.1	838.5	7.6	498.9	191.6	
16:22:30	11.1	860.3	7.6	495.4	191.6	
16:23:35	11.1	873.9	7.6	496.7	191.6	
16:24:40	11.2	829.7	7.6	493.2	191.7	
16:25:44	11.0	827.0	7.8	509.1	191.7	
16:26:49	10.8	840.0	8.0	527.6	191.7	
16:27:53	10.9	843.6	7.8	520.7	191.7	
16:28:58	11.0	815.2	7.8	506.4	191.8	
16:30:03						
16:31:07						
16:32:11						
16:33:15						
16:34:19						
16:35:23	11.7	811.6	7.4	414.1	191.9	
16:36:27	11.4	816.7	7.4	445.8	191.9	
16:37:32	11.5	810.4	7.3	445.0	192.0	
16:38:37	11.4	817.6	7.5	452.5	192.0	
16:39:42	11.2	817.9	7.5	461.8	192.0	
16:40:46	11.3	800.4	7.4	458.8	192.0	
16:41:50	11.5	793.2	7.3	453.1	192.1	
16:42:55	11.4	806.4	7.4	453.8	192.1	
16:43:59	11.2	808.9	7.5	467.6	192.1	

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 4 05-03-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
16:45:04	11.3	795.9	7.5	466.5	179.9	
16:46:08	11.3	811.6	7.6	471.7	180.0	
16:47:13	11.0	812.5	7.7	492.7	180.0	
16:48:18	11.3	783.2	7.5	472.5	180.0	
16:49:22	11.2	778.0	7.5	471.9	180.0	
16:50:27	11.3	781.1	7.5	474.5	180.0	
16:51:32	11.1	796.8	7.6	480.7	192.3	
16:52:36	11.1	792.5	7.6	485.0	192.3	
16:53:41	11.2	799.5	7.6	478.3	192.4	
16:54:45	11.3	798.9	7.5	471.5	192.4	
16:55:50	11.2	783.8	7.5	477.5	180.2	
16:56:55	11.1	778.6	7.6	482.2	180.2	
16:57:59	11.2	772.3	7.7	486.8	180.2	
16:59:04	11.0	795.2	7.7	498.7	180.2	
17:00:09						
17:01:13						
17:02:17						
17:03:21	11.3	796.4	7.6	449.8	180.3	
17:04:24	11.1	788.6	7.6	481.3	180.4	
17:05:29	11.3	789.5	7.4	466.9	180.4	
17:06:33	11.1	775.3	7.6	477.6	180.4	
17:07:38	11.2	784.3	7.5	478.6	192.7	
17:08:43	11.4	805.8	7.2	458.6	192.7	
17:09:48	11.5	821.8	7.2	455.3	192.7	
17:10:53	11.4	828.2	7.3	463.5	192.8	
17:11:57	11.4	846.6	7.3	463.0	180.5	
17:13:02	11.4	848.4	7.3	463.7	192.8	
17:14:07	11.4	924.3	7.3	459.1	192.9	
17:15:12	11.1	838.1	7.6	488.3	192.9	
17:16:17	11.2	840.3	7.4	485.5	180.6	
17:17:22	11.4	863.8	7.3	465.9	180.7	
17:18:27	11.3	893.1	7.4	471.2	193.0	
17:19:32	11.1	890.1	7.6	488.6	193.0	
17:20:36	11.0	893.7	7.6	499.5	193.0	
17:21:41	11.1	882.6	7.6	495.8	193.0	
17:22:47	11.4	908.0	7.2	470.6	180.8	
17:23:52	11.3	905.2	7.3	470.4	180.8	
17:24:57	11.2	892.8	7.5	483.7	193.1	
17:26:01	11.2	873.2	7.5	491.4	180.8	
17:27:06	11.1	885.6	7.7	501.3	180.9	
17:28:11	11.1	878.6	7.6	498.4	180.9	
17:29:15	11.6	877.7	7.7	509.5	180.9	
17:30:20	11.1	829.4	6.9	494.2	180.9	
17:31:24						
17:32:28						
17:33:32						
17:34:35	11.0	850.2	7.7	476.6	181.0	
17:35:39	10.8	869.6	7.9	516.1	181.1	
17:36:43	10.5	869.9	8.1	543.1	193.4	
17:37:48	10.8	856.9	7.8	523.5	193.4	
17:38:53	11.1	848.4	7.7	495.1	193.5	
17:39:57	11.0	840.5	7.7	503.5	193.5	
17:41:02	10.9	834.8	7.8	510.6	193.5	
17:42:07	10.7	829.0	8.0	523.8	181.2	
17:43:11	10.8	826.6	7.8	515.5	181.2	
17:44:16	11.1	801.8	7.6	496.1	181.3	

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 4 05-03-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
17:45:20	11.0	821.8	7.7	496.6	193.6	
17:46:25	10.9	817.8	7.9	516.0	193.6	
17:47:30	10.7	792.2	8.0	527.4	181.3	
17:48:34	11.0	811.2	7.6	500.0	181.4	
17:49:39	11.2	828.7	7.4	478.4	193.7	
17:50:43	11.5	847.5	7.2	461.1	193.7	
17:51:48	11.4	860.2	7.3	465.5	193.8	
17:52:52	11.0	842.0	7.7	506.1	181.5	
17:53:57	11.0	836.6	7.7	506.8	193.8	
17:55:02	11.1	832.6	7.5	491.9	181.5	
17:56:07	11.1	833.9	7.5	485.9	181.5	
17:57:11	10.9	859.2	7.8	512.1	181.6	
17:58:16	10.9	858.6	7.8	515.3	181.6	

=====

POINTS	105	105	105	105	105	0
MEAN	11.2	835.4	7.5	483.8	186.6	0.0
STD. DEV.	0.2	34.1	0.2	24.1	6.1	0.0

SEWAGE SLUDGE - JACKSONVILLE, FL 05-03-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
18:04:21						
18:05:24	11.3	837.2	7.5	424.6	206.3	
18:06:27	11.4	843.2	7.1	455.2	181.7	
18:07:31	11.4	873.1	7.0	412.3	181.7	
18:08:35	11.6	892.8	6.8	411.0	169.4	
18:09:39	11.6	905.8	6.9	418.1	169.5	
18:10:44	11.4	899.7	7.1	444.4	181.9	
18:11:48	11.1	890.7	7.5	467.3	169.5	
18:12:52	10.8	904.3	7.7	495.9	169.6	
18:13:57	10.7	865.6	7.7	503.5	182.0	
18:15:01	11.0	851.4	7.5	480.7	182.0	
18:16:06	11.1	863.8	7.5	471.4	182.1	
18:17:10	10.9	852.9	7.5	478.7	182.1	
18:18:14	11.1	887.6	7.4	469.3	182.2	
18:19:19	11.1	913.0	7.4	464.6	182.2	
18:20:24	11.1	909.7	7.4	463.8	182.3	
18:21:29	10.9	894.3	7.8	492.3	182.3	
18:22:33	10.6	901.2	7.8	512.8	182.4	
18:23:37	10.7	852.9	7.8	508.3	182.4	
18:24:42	10.9	846.8	7.4	479.8	182.4	
18:25:46	11.2	889.1	7.3	456.6	182.5	
18:26:51	11.1	908.8	7.4	459.4	182.5	
18:27:55	11.1	900.6	7.5	466.8	182.6	
18:29:00	11.1	925.1	7.3	472.6	182.6	
18:30:05	11.4	967.4	7.1	457.8	195.1	
18:31:09	11.0	916.0	7.6	486.3	195.1	
18:32:14	11.0	897.9	7.6	490.6	195.2	
18:33:18	11.0	906.1	7.5	485.2	195.2	
18:34:23	11.1	912.7	7.4	476.8	195.3	
18:35:28						
18:36:32						
18:37:36						
18:38:40	12.0	892.7	7.4	413.1	195.5	
18:39:43	11.2	932.1	7.3	450.2	195.5	
18:40:48	11.2	910.0	7.5	465.3	183.1	
18:41:52	11.0	887.3	7.5	483.4	183.2	
18:42:57	11.1	897.0	7.4	476.1	183.2	
18:44:02	11.0	895.2	7.7	493.5	183.3	
18:45:07	10.9	882.8	7.7	500.5	183.3	
18:46:11	10.9	889.4	7.7	500.2	183.4	
18:47:16	11.0	896.4	7.5	489.5	195.9	
18:48:21	11.1	886.7	7.5	475.7	195.9	
18:49:26	11.1	889.1	7.4	476.5	196.0	
18:50:31	10.9	881.5	7.7	498.7	196.0	
18:51:36	10.6	873.4	8.0	530.8	196.1	
18:52:41	10.7	847.4	7.8	522.8	196.1	
18:53:45	10.9	857.0	7.6	500.3	196.2	
18:54:50	11.0	869.7	7.5	490.4	196.2	
18:55:54	11.0	848.9	7.6	492.4	196.3	
18:56:58	11.1	841.9	7.3	478.5	196.3	
18:58:03	11.3	880.0	7.3	468.5	196.4	

SEWAGE SLUDGE - JACKSONVILLE. FL 05-03-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
18:59:07	11.2	886.1	7.3	473.5	196.4	
19:00:12	11.2	866.4	7.4	477.5	196.5	
19:01:17						
19:02:21						
19:03:25						
19:04:29	12.4	841.3	7.3	678.5	172.6	
19:05:33	11.0	854.0	7.5	748.8	163.0	
19:06:38	11.0	840.4	7.5	742.8	159.2	
19:07:42	11.0	848.2	7.6	731.0	171.7	
19:08:47	10.9	839.5	7.6	724.4	171.8	
19:09:52	10.9	849.1	7.5	705.8	171.8	
19:10:56	10.9	858.5	7.6	677.7	184.4	
19:12:01	11.0	885.1	7.4	632.7	197.0	
19:13:06	11.7	979.5	6.6	534.6	197.1	
19:14:10	11.6	896.6	6.9	509.3	184.6	

POINTS	59	59	59	59	59	0
MEAN	11.1	883.6	7.4	507.6	185.7	0.0
STD. DEV.	0.3	29.5	0.3	83.5	10.1	0.0

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 4 05-03-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
20:05:00	11.5	769.3	6.9	415.8	197.1	
20:06:03	11.6	776.5	6.9	416.1	197.1	
20:07:06	11.5	774.4	6.7	420.2	197.1	
20:08:11	11.6	759.9	6.8	409.7	197.1	
20:09:15	11.6	761.7	6.9	410.4	197.1	
20:10:19	11.6	772.9	6.9	415.7	197.1	
20:11:23	11.8	774.4	6.7	395.2	197.1	
20:12:28	12.1	782.3	6.5	375.8	197.1	
20:13:32	12.2	775.0	6.5	368.0	197.1	
20:14:35	12.1	773.8	6.6	380.8	197.1	
20:15:39	11.9	776.5	6.6	391.7	197.1	
20:16:42	11.8	763.8	6.9	405.6	197.1	
20:17:46	11.5	755.0	7.2	428.8	197.1	
20:18:51	11.3	751.7	7.3	439.9	197.1	
20:19:56	11.4	727.2	7.0	423.3	197.1	
20:21:00	11.8	723.3	6.7	394.6	197.1	
20:22:05	12.1	751.7	6.5	372.5	197.1	
20:23:09	12.3	781.1	6.4	360.9	197.1	
20:24:13	11.9	766.8	6.7	381.0	197.1	
20:25:16	11.7	752.0	6.9	403.1	197.1	
20:26:20	11.6	751.7	7.0	413.9	197.1	
20:27:24	11.7	761.1	6.7	404.8	197.1	
20:28:29	12.2	773.8	6.5	371.9	197.1	
20:29:33	12.2	788.3	6.4	361.8	197.1	
20:30:37	12.5	855.2	6.2	347.4	197.1	
=====						
POINTS	25	25	25	25	25	0
MEAN	11.8	768.0	6.7	396.4	197.1	0.0
STD. DEV.	0.3	23.5	0.3	23.7	0.0	0.0

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 5 03-04-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
10:31:35	10.6	961.6	7.8	1064.7	202.9	
10:32:39	10.3	933.5	8.0	1064.6	202.8	
10:33:43	10.0	933.0	8.2	1002.6	202.8	
10:34:46	9.9	879.6	8.2	913.8	202.8	
10:35:49	9.9	944.1	8.2	825.3	202.8	
10:36:53	10.2	868.4	8.1	694.5	202.8	
10:37:56	10.3	833.5	8.0	567.1	202.7	
10:39:00	10.3	843.3	8.0	509.9	202.7	
10:40:04	10.4	864.9	8.0	504.6	214.3	
10:41:07	10.2	918.0	8.2	517.8	214.2	
10:42:10	10.0	1003.7	8.2	524.5	214.2	
10:43:14	10.0	1019.0	8.2	523.2	214.2	
10:44:17	10.0	976.8	8.2	520.3	214.2	
10:45:21	10.4	862.1	8.0	493.6	214.2	
10:46:24	10.2	1085.9	8.2	504.2	220.3	
10:47:28	10.3	1026.5	8.0	503.5	220.3	
10:48:32	10.4	943.9	8.1	488.7	220.3	
10:49:36	10.2	1029.5	8.1	504.4	220.2	
10:50:40	10.3	900.0	8.1	492.2	220.2	
10:51:43	10.1	1123.6	8.2	510.6	220.2	
10:52:47	9.7	1336.1	8.4	538.2	220.2	
10:53:51	9.7	1258.9	8.4	534.7	220.2	
10:54:55	9.7	1100.2	8.4	530.2	220.2	
10:55:59	9.9	1148.8	8.2	516.3	225.7	
10:57:03	10.2	1077.5	8.1	496.9	225.7	
10:58:06	10.3	977.1	8.0	486.8	225.7	
10:59:10	10.3	980.3	8.1	481.9	225.7	
11:00:13	10.1	1075.2	8.2	501.9	225.7	
11:01:17	9.9	1165.0	8.2	516.1	237.8	
11:02:20						
11:03:24						
11:04:28						
11:05:31	9.9	1435.3	8.4	802.7	249.8	
11:06:35	9.9	1081.5	8.5	823.3	297.3	
11:07:38	9.9	1081.6	8.4	698.4	321.6	
11:08:42	9.9	1081.4	8.2	524.5	321.6	
11:09:45	9.9	1081.4	8.1	496.3	332.7	
11:10:49	9.9	1081.4	8.1	497.6	309.4	
11:11:53	9.9	1081.3	8.1	500.5	321.5	
11:12:56	10.3	1081.6	8.1	496.0	309.4	
11:14:00	10.0	1173.6	8.3	522.0	285.1	
11:15:04	9.9	1096.6	8.3	528.9	297.2	
11:16:07	9.7	1165.6	8.5	539.9	285.1	
11:17:11	9.7	1249.5	8.5	557.5	297.2	
11:18:15	10.0	1103.9	8.3	524.5	285.1	
11:19:19						
11:20:23						
11:21:26						
11:22:29						
11:23:33						
11:24:36						

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 5 05-04-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
11:25:40						
11:26:43						
11:27:47						
11:28:50						
11:29:54						
11:30:57	9.9	1048.5	8.2	1059.9	237.3	
11:32:02	10.6	1041.5	7.6	1059.8	225.2	
11:33:07	10.2	1294.1	8.0	399.0	237.3	
11:34:11	10.2	520.6	2.6	105.5	213.0	
11:35:14	10.7	681.0	6.2	475.2	249.4	
11:36:18	11.3	1449.5	8.5	751.1	284.8	
11:37:22	11.7	1313.4	8.4	739.0	249.4	
11:38:26	12.0	945.7	8.2	641.0	290.4	
11:39:30	12.2	874.8	7.9	579.8	272.7	
11:40:34	12.6	915.0	7.8	571.7	284.8	
11:41:37	12.7	901.7	7.7	548.1	249.3	
11:42:41	12.8	847.8	7.6	523.7	237.1	
11:43:45	13.1	813.2	7.7	525.2	237.1	
11:44:48	13.2	990.9	8.0	539.2	237.1	
11:45:52	12.3	1353.1	8.2	586.8	237.1	
11:46:56	11.7	1341.2	8.3	608.7	296.9	
11:48:00	10.4	1308.0	8.4	627.3	284.7	
11:49:03	9.9	1506.9	8.6	652.3	284.7	
11:50:07	9.8	1208.0	8.3	613.6	296.8	
11:51:11	9.9	1030.4	8.3	567.0	296.8	
11:52:14	10.0	1001.0	8.4	567.2	321.1	
11:53:18	9.9	1272.2	8.5	598.6	272.5	
11:54:22	9.8	1126.0	8.5	596.7	296.8	
11:55:25	9.8	912.6	8.2	558.1	284.6	
11:56:29	10.2	918.3	8.1	515.6	284.6	
11:57:33	10.3	982.5	8.1	515.5	272.4	
11:58:37	10.3	902.5	8.1	510.4	261.2	
11:59:41	10.3	846.9	8.1	502.8	261.2	

POINTS	70	70	70	70	70	0
MEAN	10.4	1050.4	8.1	591.2	251.8	0.0
STD. DEV.	0.9	186.8	0.7	166.1	38.4	0.0

SEWAGE SLUDGE - JACKSONVILLE. FL DAY 5 05-04-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
12:03:57	10.5	942.1	7.9	421.8	344.4	
12:05:00	10.5	854.5	7.9	463.2	344.4	
12:06:03	10.5	859.0	7.9	463.3	344.4	
12:07:06	10.5	836.4	7.9	466.9	344.3	
12:08:10	10.7	821.9	7.8	463.9	344.3	
12:09:13	10.4	923.0	7.9	482.4	368.6	
12:10:17	10.3	1235.0	8.0	517.2	404.2	
12:11:20	10.2	1375.9	8.1	531.6	404.2	
12:12:24	10.1	1442.9	8.2	542.2	404.2	
12:13:27	10.1	1410.4	8.1	534.1	404.1	
12:14:31	10.2	1289.2	8.0	515.6	291.9	
12:15:34						
12:16:38						
12:17:41						
12:18:45						
12:19:48	11.3	1012.3	7.1	218.7	212.4	
12:20:52	11.8	718.0	6.5	246.1	69.2	
12:21:56	15.2	463.0	4.2	161.3	188.9	
12:22:59	12.8	690.2	5.8	198.4	116.9	
12:24:03	13.8	604.5	4.9	192.8	44.8	
12:25:06	15.0	545.0	4.3	150.7	9.3	
12:26:10						
12:27:14						
12:28:18						
12:29:22						
12:30:25						
12:31:29	11.2	1099.8	7.4	549.8	71.8	
12:32:32	10.4	1208.4	7.9	874.8	236.5	
12:33:36	10.3	1175.2	7.9	750.7	248.7	
12:34:40	10.3	1139.2	7.9	617.8	248.7	
12:35:44	10.1	1378.6	7.9	530.6	260.8	
12:36:48	10.2	1361.0	7.8	484.9	260.8	
12:37:52	12.5	1112.0	5.3	401.0	212.1	
12:38:55						
12:39:59						
12:41:03						
12:42:07	9.8	1348.1	8.3	982.1	188.7	
12:43:10	9.4	1846.1	8.5	830.6	188.7	
12:44:14	9.6	1417.6	8.3	645.7	188.6	
12:45:18	10.4	881.8	7.9	530.9	188.6	
12:46:22	10.6	909.5	7.7	505.4	188.6	
12:47:26	10.4	1003.2	7.9	479.8	236.4	
12:48:30	10.2	1045.1	8.0	492.4	248.5	
12:49:34	9.9	1195.0	8.2	486.2	260.7	
12:50:38	9.8	1250.0	8.3	510.0	271.9	
12:51:42	9.9	1281.7	8.2	522.2	271.9	
12:52:46	10.2	1279.3	8.0	520.0	271.9	
12:53:49	10.3	1338.6	7.9	497.5	271.9	
12:54:53						
12:55:56						
12:57:00						

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 5 05-04-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
12:58:04	11.2	1494.4	8.6	507.2	224.0	
12:59:07	8.9	1473.5	8.9	739.0	236.2	
13:00:11	9.0	1384.6	8.9	721.2	248.4	
13:01:15	9.0	1251.1	8.9	705.0	248.4	
13:02:18	8.9	1177.0	9.0	668.1	260.5	
13:03:22	8.8	1115.3	9.0	677.8	271.8	
13:04:26	8.5	1037.0	9.3	707.7	239.9	
13:05:30	7.9	951.6	9.8	790.7	202.4	
13:06:33	7.0	809.7	10.3	972.4	200.5	
13:07:37	6.9	593.0	10.3	1053.5	223.9	*
13:08:42	7.0	415.3	10.5	1053.5	236.1	*
13:09:47	6.1	252.6	11.3	1053.4	248.3	*
13:10:51	4.0	153.2	12.7	1053.3	236.1	*
13:11:56	1.1	160.1	14.3	1030.2	223.9	*
13:13:01	0.1	1465.2	14.1	1043.5	223.9	*
13:14:05	0.1	4254.3	13.7	1053.1	211.7	*
13:15:09	0.1	4391.4	12.9	1052.8	176.0	*
13:16:13	0.1	4392.7	12.3	1053.0	176.0	*
13:17:17	3.8	3751.8	5.5	1052.7	176.0	*
13:18:21	11.7	2258.1	3.4	1052.4	164.7	*
13:19:25	14.0	1699.7	1.6	1052.6	164.7	*
13:20:29	20.0	263.8	0.3	1052.3	164.7	*
13:21:33	15.5	267.8	4.9	1052.2	164.7	*
13:22:37	11.7	213.2	6.5	1052.5	140.3	*
13:23:41	12.	115.6	6.0	1052.2	163.7	*
13:24:45	13.	115.4	5.3	1052.2	128.1	*
13:25:49	14.2	223.3	4.7	1052.0	128.0	*
13:26:53	15.0	224.7	4.1	1052.3	128.0	*
13:27:57	15.3	245.2	3.9	1052.0	128.0	*
13:29:02	15.0	304.4	4.1	1052.2	128.0	*
13:30:06	15.1	376.0	4.0	1052.1	128.0	*
13:31:10	15.2	450.4	3.9	1051.5	127.9	*
13:32:14	15.3	528.2	3.8	1051.5	127.9	*
13:33:18	15.4	550.8	3.8	1051.6	140.1	*
13:34:22	15.1	568.8	3.9	1051.7	127.9	*
13:35:26	15.2	634.7	3.8	788.4	127.9	
13:36:30	15.3	701.3	3.7	124.0	127.9	
13:37:35	15.4	760.5	3.6	117.0	127.8	
13:38:39	15.4	811.4	3.6	113.2	127.8	
13:39:42	15.4	811.2	3.5	110.8	127.8	
13:40:46	15.4	811.4	3.6	106.9	127.8	
13:41:50	15.4	811.3	3.8	105.1	127.8	
13:42:53	15.4	811.6	3.8	104.1	127.8	
13:43:57	15.4	811.3	3.8	104.6	127.7	
13:45:01	15.4	811.9	3.8	112.5	139.9	
13:46:04	14.9	1097.2	3.8	114.9	139.9	
13:47:08	14.8	1111.6	3.9	118.6	127.7	
13:48:11	14.5	1110.4	3.9	119.4	127.7	
13:49:15	14.5	1113.4	3.9	120.1	127.6	
13:50:18	14.4	1132.1	3.9	121.1	127.6	
13:51:22	14.3	1164.4	4.0	114.5	127.6	
13:52:26						
13:53:30						
13:54:33						
13:55:37	15.2	1220.7	4.1	113.2	259.9	
13:56:41	14.2	1281.4	4.2	115.9	259.9	

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SEWAGE SLUDGE - JACKSONVILLE, FL DAY 3 05-04-87

	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
POINTS	89	89	89	89	89	0
MEAN	11.3	1086.1	6.8	610.4	203.0	0.0
STD.DEV.	4.0	798.1	2.9	354.3	83.7	0.0

*SO2 CEM OVERRANGED-DATA NOT REMOVED FROM DATA SET

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 5 05-04-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
14:03:56	11.0	1506.8	6.4	249.9	127.5	
14:04:58	10.9	1513.9	6.5	257.8	127.5	
14:06:02	10.8	1545.8	6.6	265.6	127.5	
14:07:05	10.8	1560.7	6.8	280.6	127.5	
14:08:08	10.6	1558.7	6.9	289.6	127.5	
14:09:12	10.5	1574.0	7.1	301.8	127.4	
14:10:15	10.3	1605.3	7.2	313.2	127.4	
14:11:19	10.0	1588.0	7.4	326.7	127.4	
14:12:22	10.2	1552.7	7.2	323.8	127.4	
14:13:26	10.1	1567.3	7.4	331.4	127.4	
14:14:29	10.0	1548.0	7.4	345.6	127.4	
14:15:33	9.9	1479.6	7.5	356.4	127.3	
14:16:36	9.8	1413.8	7.6	364.7	115.1	
14:17:40	9.9	1345.7	7.5	370.8	115.1	
14:18:43	9.6	1547.5	7.8	393.6	115.1	
14:19:47	9.5	1473.4	7.9	411.5	115.0	
14:20:51	9.3	1481.9	8.1	428.4	115.0	
14:21:54	8.9	1589.6	8.4	452.1	115.0	
14:22:58	8.7	1619.1	8.6	467.4	115.0	
14:24:02	8.4	1782.0	8.8	486.4	115.0	
14:25:05	7.9	2126.6	8.9	513.7	115.0	
14:26:09	8.1	1980.8	8.9	523.7	114.9	
14:27:12	7.9	2067.6	9.1	537.5	114.9	
14:28:16	7.5	2302.4	9.4	574.7	114.9	
14:29:20	6.9	2579.8	9.7	608.3	114.9	
14:30:24	6.2	3221.6	10.0	662.3	114.9	
14:31:28	9.7	2212.0	4.7	424.9	114.9	
14:32:31						
14:33:35						
14:34:39	5.1	4425.8	10.3	657.6	150.5	
14:35:43	4.6	4443.2	10.4	681.6	139.2	
14:36:47	5.0	2587.9	11.0	756.6	127.0	
14:37:51	6.8	1211.7	10.1	696.8	127.0	
14:38:54	7.7	1076.5	9.7	661.5	126.9	
14:39:58	8.8	862.1	8.9	599.9	126.9	
14:41:02	9.8	724.3	8.3	536.6	114.7	
14:42:06	10.5	688.7	7.8	495.5	114.7	
14:43:09	10.9	633.6	7.4	465.0	114.7	
14:44:13	11.3	606.5	7.1	445.5	102.4	
14:45:17	11.5	589.0	7.0	431.8	102.4	
14:46:21	11.7	591.6	6.8	421.1	102.4	
14:47:25	11.8	593.8	6.7	412.3	102.3	
14:48:29	11.9	589.5	6.7	409.0	102.3	
14:49:33	12.2	577.2	6.5	398.2	102.3	
14:50:37	12.4	566.6	6.4	389.8	102.3	
14:51:41	12.5	557.6	6.4	382.9	102.3	
14:52:45	12.6	561.5	6.3	381.3	102.3	
14:53:48	12.5	570.4	6.4	385.4	102.2	
14:54:52	12.2	581.9	6.5	397.4	102.2	
14:55:55	12.2	579.8	6.5	402.9	102.2	
14:56:59	12.4	578.5	6.4	395.0	102.2	

SEWAGE SLUDGE - JACKSONVILLE. FL DAY 5 05-04-87

TIME	O2 (%)	CO (PPMV)	CO2 (%)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
14:58:03	12.6	581.7	6.3	392.2	102.2	
14:59:07	12.5	590.0	6.4	392.1	102.1	
15:00:10	12.5	590.6	6.3	394.5	102.1	
15:01:14	12.7	599.8	6.1	385.3	102.1	
15:02:18						
15:03:21						
15:04:25						
15:05:29	12.6	656.1	6.4	391.2	102.0	
15:06:33	12.1	728.9	6.5	421.5	102.0	
15:07:36	11.8	838.9	6.8	447.5	102.0	
15:08:40	11.5	958.7	7.1	468.9	102.0	
15:09:44	11.2	1072.3	7.4	493.9	102.0	
15:10:48	10.9	1113.0	7.6	511.1	101.9	
15:11:52	10.6	1326.3	7.9	539.3	101.9	
15:12:55	10.1	1641.3	8.2	569.7	101.9	
15:13:59	10.0	1699.6	8.2	583.0	114.1	
15:15:03	9.6	1933.7	8.4	591.6	114.1	
15:16:07	9.5	1848.0	8.4	594.2	114.1	
15:17:10	9.4	2007.6	8.6	611.7	126.3	
15:18:14	9.3	2116.2	8.7	623.3	126.3	
15:19:18	8.9	2228.5	8.9	642.5	126.3	
15:20:22	8.7	2301.1	9.0	652.8	138.5	
15:21:26	8.6	2207.5	9.0	657.3	138.5	
15:22:30	8.5	2207.3	9.0	658.6	149.8	
15:23:34	8.2	2418.5	9.3	683.6	149.8	
15:24:38	8.5	2971.6	9.6	713.7	162.0	
15:25:42	8.1	3072.4	9.7	725.0	162.0	
15:26:45	8.2	2843.3	9.5	712.1	162.0	
15:27:49	8.2	2590.9	9.4	703.1	161.9	
15:28:53	8.2	2530.6	9.4	693.3	161.9	
15:29:57	8.3	2676.0	9.5	695.5	161.9	
15:31:01	8.0	2978.7	8.9	682.3	161.9	
15:32:05						
15:33:09						
15:34:13						
15:35:17	7.8	2840.6	9.6	652.5	149.6	
15:36:22	7.7	2742.3	9.5	681.9	149.6	
15:37:26	7.8	2733.6	9.4	684.7	149.5	
15:38:29	7.6	2993.3	9.6	694.0	149.5	
15:39:33	7.4	3023.0	9.7	705.8	161.8	
15:40:37	7.6	2650.3	9.6	696.1	161.8	
15:41:40	7.7	2744.5	9.6	690.0	161.7	
15:42:44	7.3	3038.3	9.7	703.2	161.7	
15:43:48	7.9	3084.9	9.7	673.3	161.7	
15:44:51	7.5	3291.1	9.7	647.7	161.7	
15:45:55	7.2	3534.9	9.9	637.9	173.9	
15:46:58	7.1	3459.7	10.0	629.5	173.9	
15:48:02	7.1	3307.0	9.9	626.1	173.9	
15:49:05	7.3	3081.6	9.7	630.8	173.9	
15:50:09	7.4	2726.6	9.5	634.9	161.6	
15:51:13	7.6	2640.3	9.5	643.0	161.6	
15:52:17	7.6	2949.5	9.6	651.3	161.6	
15:53:20	7.7	3102.6	9.7	656.7	173.8	
15:54:24	7.4	3166.2	9.7	656.2	173.8	
15:55:28	7.6	3115.7	9.5	650.1	173.8	
15:56:32	7.6	2942.8	9.5	648.9	173.8	

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 5 05-04-87

	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
POINTS	99	99	99	99	99	0
MEAN	9.4	1878.9	8.3	527.2	129.5	0.0
STD.DEV.	2.0	981.5	1.4	140.4	24.4	0.0

SEWAGE SLUDGE - JACKSONVILLE. FL DAY 3 05-04-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
16:10:06	7.6	3067.9	9.6	610.1	149.3	
16:11:09	7.7	2820.2	9.5	611.7	149.2	
16:12:12	7.7	2843.7	9.6	630.3	149.2	
16:13:16	7.8	2661.0	9.5	634.7	161.5	
16:14:19	7.8	2879.7	9.5	639.9	161.4	
16:15:22	7.8	2816.9	9.5	638.0	161.4	
16:16:26	7.8	2857.6	9.4	634.8	161.4	
16:17:29	7.8	3089.5	9.5	637.8	161.4	
16:18:33	7.7	3182.6	9.5	636.6	161.4	
16:19:37	7.7	3093.3	9.6	632.6	161.4	
16:20:40	7.7	3136.6	9.6	631.4	161.3	
16:21:43	7.7	2959.6	9.6	636.4	161.3	
16:22:47	7.9	2732.3	9.4	633.0	173.6	
16:23:50	8.0	2511.2	9.4	636.2	173.6	
16:24:54	8.0	2605.0	9.5	639.9	173.6	
16:25:58	7.7	2809.6	9.7	653.7	173.5	
16:27:02	7.6	2659.4	9.7	654.6	173.5	
16:28:06	7.8	2549.6	9.8	656.1	161.2	
16:29:09	7.6	2746.6	9.8	661.7	161.2	
16:30:12	7.4	2960.8	9.8	671.9	161.2	
16:31:16	8.1	2543.8	7.8	586.2	173.5	
16:32:20						
16:33:23						
16:34:27						
16:35:31						
16:36:34	8.6	2287.1	9.2	625.8	148.8	
16:37:38	8.1	2459.7	9.4	661.5	148.8	
16:38:42	7.9	2653.3	9.6	669.1	161.1	
16:39:45	7.9	2717.9	9.5	645.1	161.1	
16:40:49	7.7	2851.5	9.7	639.9	161.0	
16:41:53	7.6	2861.9	9.7	640.6	161.0	
16:42:57	7.6	2824.4	9.6	632.2	161.0	
16:44:01	7.8	2588.1	9.6	633.2	161.0	
16:45:05	7.9	2688.7	9.5	633.1	161.0	
16:46:08	8.1	2615.2	9.5	628.4	161.0	
16:47:12	8.1	2487.1	9.5	630.3	160.9	
16:48:16	7.8	2984.5	9.7	642.6	185.5	
16:49:20	7.7	3231.4	9.8	646.5	173.2	
16:50:23	7.9	2849.0	9.3	631.6	160.9	
16:51:27	10.4	1739.3	7.8	545.7	148.6	
16:52:31	10.8	1633.3	7.6	531.5	137.2	
16:53:35	10.9	1545.8	7.6	529.6	124.9	
16:54:39	10.8	1737.7	7.7	540.9	124.9	
16:55:43	10.6	1939.3	7.9	545.3	137.2	
16:56:47	10.5	1831.5	8.0	558.7	137.2	
16:57:51	10.0	2120.7	8.3	579.9	137.1	
16:58:55	9.5	2189.6	8.5	601.5	137.1	
16:59:59	9.2	2406.6	8.8	621.8	137.1	
17:01:02						
17:02:06						
17:03:09						

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 3 05-04-87

TIME	O2 (%)	CO (PPMV)	CO2 (%)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
17:04:13	11.3	1818.2	7.6	460.8	112.4	
17:05:17	10.7	1897.2	7.8	543.4	124.7	
17:06:20	10.8	1807.7	7.7	541.7	124.7	
17:07:24	11.1	1579.0	7.5	521.3	124.7	
17:08:28	11.4	1231.9	7.3	499.2	112.4	
17:09:31	11.6	1091.6	7.2	484.9	112.3	
17:10:35	11.9	1062.4	6.9	473.5	100.0	
17:11:39	11.8	1075.6	6.9	467.3	100.0	
17:12:43	11.7	1157.0	7.1	476.9	100.0	
17:13:46	11.8	1031.6	7.0	476.1	100.0	
17:14:50	11.7	1032.4	7.1	480.8	100.0	
17:15:54	12.0	951.6	6.8	468.4	99.9	
17:16:58	12.1	940.6	6.7	459.4	99.9	
17:18:02	12.3	946.9	6.5	453.5	99.9	
17:19:05	12.3	1021.1	6.5	454.3	99.9	
17:20:09	12.2	1058.6	6.5	457.2	99.9	
17:21:13	12.0	1063.3	6.8	469.4	99.8	
17:22:17	12.0	936.8	6.8	476.2	99.8	
17:23:20	11.8	981.6	7.0	490.7	99.8	
17:24:24	11.5	1111.2	7.3	513.2	99.8	
17:25:28	11.3	1062.4	7.4	524.1	99.8	
17:26:32	11.3	958.7	7.5	529.7	99.7	
17:27:36	11.5	833.0	7.4	520.0	99.7	
17:28:40	12.1	713.8	6.7	484.4	99.7	
17:29:44	12.6	732.2	6.6	465.0	99.7	
17:30:48						
17:31:52						
17:32:55						
17:33:59						
17:35:03	12.6	716.9	6.4	422.9	99.6	
17:36:08	12.6	749.3	6.4	427.2	99.6	
17:37:12	12.5	799.1	6.5	434.8	99.5	
17:38:16	12.6	875.2	6.4	433.8	99.5	
17:39:20	12.6	909.1	6.3	422.6	99.5	
17:40:24	12.6	885.1	6.4	421.3	99.5	
17:41:28	12.5	940.6	6.4	421.1	99.5	
17:42:32	12.3	955.7	6.5	440.3	99.5	
17:43:36	12.1	1043.5	6.6	452.4	99.4	
17:44:40	11.9	1157.6	6.8	465.8	99.4	
17:45:43	11.7	1218.2	6.9	476.5	99.4	
17:46:47	11.5	1438.4	7.2	495.0	111.7	
17:47:51	11.1	1707.4	7.4	511.2	124.0	
17:48:54	10.9	1775.4	7.5	520.2	124.0	
17:49:58	10.8	1731.6	7.6	522.3	123.9	
17:51:02	10.7	1667.9	7.7	527.7	111.6	
17:52:05	10.7	1612.9	7.8	533.6	111.6	
17:53:09	10.5	1491.2	7.9	546.4	111.6	
17:54:12	10.4	1418.2	8.1	555.6	111.6	
17:55:16	9.5	1612.1	8.8	590.7	111.5	
17:56:19	9.5	1560.5	8.4	621.6	111.5	
17:57:23	11.5	1037.6	7.1	514.1	111.5	
17:58:27	11.5	1034.2	7.1	505.7	111.5	
17:59:31	11.3	1098.0	7.3	513.1	111.5	

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POINTS

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SEWAGE SLUDGE - JACKSONVILLE, FL DAY 5 05-04-87

	O2	CO	CO2	SO2	NOX	THC
	(%V)	(PPMV)	(%V)	(PPMV)	(PPMV)	(PPMV)
MEAN	10.1	1852.5	8.1	552.1	130.1	0.0
STD. DEV.	1.9	810.0	1.2	77.9	27.9	0.0

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 5 05-04-81

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
18:03:12	11.4	1421.2	6.8	512.4	111.5	
18:04:15						
18:05:19						
18:06:22						
18:07:25	11.4	1563.6	7.0	477.1	111.4	
18:08:28	11.4	1523.1	7.0	477.1	111.4	
18:09:32	11.5	1591.4	6.9	478.1	111.3	
18:10:36	11.7	1508.6	6.6	461.6	111.3	
18:11:39	11.7	1482.8	6.6	453.4	111.3	
18:12:43	11.7	1492.0	6.6	453.3	111.3	
18:13:46	11.9	1473.6	6.5	446.7	123.6	
18:14:50	11.9	1494.8	6.5	441.6	123.6	
18:15:53	12.0	1526.2	6.4	435.4	123.5	
18:16:56	12.1	1562.6	6.4	421.4	135.8	
18:18:01	12.3	1609.6	6.2	407.8	135.8	
18:19:04	12.5	1681.8	6.1	395.3	135.8	
18:20:08	12.5	1807.4	5.9	381.5	147.2	
18:21:12	12.5	1889.0	5.9	369.4	147.1	
18:22:15	12.5	1987.6	5.9	364.1	147.1	
18:23:19	12.6	2023.9	5.9	362.7	147.1	
18:24:22	12.5	2071.6	5.9	358.0	147.1	
18:25:26	12.6	2088.9	5.7	333.3	147.1	
18:26:29	12.6	2183.8	5.8	349.7	147.0	
18:27:33	12.3	2120.6	6.1	374.4	135.6	
18:28:37	11.9	2097.7	6.5	406.6	123.3	
18:29:41	11.5	2036.5	6.8	428.6	110.9	
18:30:45	10.9	2014.0	7.5	478.3	110.9	
18:31:48	10.2	2005.3	8.1	539.2	98.5	
18:32:52	9.5	2141.4	8.7	610.3	98.5	
18:33:56	9.1	2422.4	9.0	674.6	86.2	
18:35:00	8.4	2987.8	9.3	729.0	74.7	
18:36:04	7.0	4139.6	10.1	792.8	86.1	
18:37:08	5.7	4789.3	10.5	830.9	110.8	
18:38:11	4.6	4791.1	10.8	807.5	135.4	
18:39:15	4.2	4792.9	10.8	745.7	159.2	
18:40:19	4.1	4794.7	11.0	683.4	171.5	
18:41:23	4.1	4766.5	11.5	697.6	171.5	
18:42:27	4.9	4334.3	11.2	679.1	183.8	
18:43:31	5.7	3856.5	10.6	652.9	207.5	
18:44:34	6.1	3877.1	10.4	643.8	207.5	
18:45:38	6.6	3586.7	10.1	629.8	196.1	
18:46:42	7.9	2757.3	9.4	584.0	171.4	
18:47:46	8.6	2308.6	9.1	569.0	159.0	
18:48:51	9.4	1843.1	8.7	542.9	159.0	
18:49:55	9.8	1682.4	8.4	518.3	146.6	
18:50:59	10.2	1409.0	8.2	505.9	146.6	
18:52:03	10.4	1294.6	8.1	493.1	146.6	
18:53:06	10.5	1242.8	8.0	486.7	135.2	
18:54:09	10.7	1156.5	7.9	475.0	135.1	
18:55:13	10.6	1238.9	7.9	478.6	135.1	
18:56:17	10.7	1242.7	7.9	477.9	135.1	

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 5 05-04-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
18:57:20	10.6	1297.2	7.9	486.5	135.1	
18:58:24	10.6	1262.6	7.9	493.9	135.1	
18:59:28	10.6	1267.2	7.9	493.4	135.0	
19:00:31	10.6	1292.2	7.9	498.3	135.0	
19:01:35						
19:02:38						
19:03:42						
19:04:46	10.4	1605.0	8.0	471.7	134.9	
19:05:50	10.2	1643.3	8.1	519.9	134.9	
19:06:54	9.8	1855.8	8.4	548.1	134.9	
19:07:58	9.6	2006.8	8.4	562.1	134.9	
19:09:01	10.2	1623.9	8.2	528.8	122.5	
19:10:05	10.5	1412.9	8.0	502.8	122.5	
19:11:09	10.7	1247.7	7.8	485.2	122.5	
19:12:13	10.8	1246.5	7.7	473.3	122.4	
19:13:16	10.7	1292.7	7.8	475.3	122.4	
19:14:20	10.5	1457.9	7.9	491.5	122.4	
19:15:24	10.7	1131.3	7.8	478.9	122.4	
19:16:27	10.8	1132.9	7.7	472.6	122.3	
19:17:31	10.7	1223.3	7.9	482.1	122.3	
19:18:35	10.5	1379.1	8.0	496.7	122.3	
19:19:39	10.6	1130.9	7.9	484.5	122.3	
19:20:43	10.8	900.7	7.8	474.5	122.3	
19:21:47	11.0	815.0	7.5	457.2	122.2	
19:22:51	11.3	794.7	7.3	439.7	122.2	
19:23:54	11.5	773.0	7.2	431.9	122.2	
19:24:58	11.3	823.5	7.4	437.0	122.2	
19:26:02	11.1	773.7	7.6	446.8	122.2	
19:27:06	11.2	698.4	7.5	446.6	122.1	
19:28:10	11.2	686.8	7.4	439.9	122.1	
19:29:14	11.6	660.1	7.1	417.1	122.1	
19:30:18	12.0	634.6	6.7	392.4	122.1	
19:31:22	12.1	631.3	6.6	383.1	122.1	
19:32:26	12.0	632.0	6.7	393.0	122.0	
19:33:30						
19:34:34						
19:35:38						
19:36:42	11.7	677.8	7.0	395.3	145.8	
19:37:46	11.6	689.1	7.0	410.9	134.3	
19:38:50	11.6	700.8	7.0	410.6	134.3	
19:39:53	11.7	726.0	7.0	414.7	134.3	
=====						
POINTS	83	83	83	83	83	0
MEAN	10.4	1805.3	7.8	495.8	132.1	0.0
STD. DEV.	2.1	1084.2	1.4	107.2	23.1	0.0

LEWAGE SLUDGE - JACKSONVILLE. FL DAY 6 05-03-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
10:30:18	9.0	1314.2	8.9	571.6	212.5	
10:31:20	8.4	1844.3	9.3	634.4	212.5	
10:32:23	8.4	1612.6	9.2	620.9	224.6	
10:33:26	9.0	1193.0	8.9	583.5	212.5	
10:34:30	8.9	1497.0	8.9	573.9	212.6	
10:35:33	9.0	1353.5	8.8	567.6	224.6	
10:36:36	9.0	1349.7	8.8	565.3	212.6	
10:37:40	9.0	1349.7	8.8	572.0	224.7	
10:38:43	8.9	1612.3	8.9	586.7	224.7	
10:39:47	8.7	1573.3	9.0	599.7	224.7	
10:40:50	8.7	1498.4	9.1	600.8	224.7	
10:41:54	8.6	1599.6	9.1	606.0	236.8	
10:42:57	8.6	1554.3	9.2	604.6	236.9	
10:44:01	8.6	1508.3	9.2	607.3	236.9	
10:45:05	8.7	1369.6	9.0	595.8	224.8	
10:46:09	8.9	1245.8	8.9	584.5	224.9	
10:47:13	9.3	978.9	8.7	555.7	224.9	
10:48:16	9.0	1312.8	8.9	570.0	224.9	
10:49:20	8.8	1518.4	8.9	584.7	224.9	
10:50:23	8.8	1440.6	9.0	588.3	224.9	
10:51:27	8.6	1546.8	9.2	596.9	225.0	
10:52:30	8.1	2003.3	9.5	624.4	237.1	
10:53:34	8.0	1878.5	9.5	627.5	249.2	
10:54:38	8.2	1723.9	9.4	622.3	249.2	
10:55:42	8.5	1614.8	9.1	601.4	249.2	
10:56:45	8.7	1581.3	9.0	589.3	237.1	
10:57:49	8.7	1589.4	9.0	591.6	237.2	
10:58:53	8.7	1472.5	9.1	595.8	237.2	
10:59:56						
11:01:00						
11:02:04						
11:03:08						
11:04:12	8.1	1097.0	9.6	614.1	225.2	
11:05:16	8.3	887.7	9.5	622.1	225.2	
11:06:19	8.5	755.2	9.4	605.3	225.2	
11:07:23	8.4	755.9	9.4	607.6	225.3	
11:08:27	8.5	755.6	8.9	580.5	225.3	
11:09:31	8.5	755.0	8.6	530.1	225.3	
11:10:34	8.5	755.1	8.2	509.9	225.3	
11:11:38	10.3	755.6	7.9	482.4	213.2	
11:12:42	10.4	767.6	7.7	465.6	213.3	
11:13:46	10.6	793.5	7.6	462.3	202.1	
11:14:50	10.8	822.8	7.5	451.8	202.1	
11:15:54	10.8	858.9	7.4	448.6	190.1	
11:16:58	10.9	864.1	7.3	439.7	178.0	
11:18:03	11.0	859.9	7.2	434.6	178.0	
11:19:06	11.2	861.3	7.1	424.8	178.0	
11:20:10	11.4	900.2	6.8	407.6	202.2	
11:21:13	11.1	901.2	7.1	405.5	190.2	
11:22:17	10.9	946.7	7.2	408.7	178.1	
11:23:20	10.7	972.9	7.4	419.6	178.1	

SEWAGE SLUDGE - JACKSONVILLE. FL DAY 6 05-05-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
11:24:24	10.5	980.0	7.5	430.4	178.1	
11:25:28	10.4	991.2	7.5	434.5	166.0	
11:26:31	10.4	1012.5	7.6	439.7	166.0	
11:27:35	10.3	1019.2	7.6	446.6	153.9	
11:28:38	10.2	1041.3	7.7	455.7	154.0	
11:29:42	10.1	1038.5	7.8	458.7	154.0	
11:30:46						
11:31:50						
11:32:54						
11:33:57						
11:35:01						
11:36:05						
11:37:08						
11:38:12	6.1	1746.2	10.9	707.5	196.2	
11:39:16	6.2	1495.3	10.7	725.4	196.2	
11:40:20	7.1	1152.2	10.0	658.3	196.3	
11:41:24	7.8	1032.8	9.6	604.6	196.3	
11:42:28	8.3	989.7	9.2	569.3	196.3	
11:43:31	8.7	979.3	9.1	543.2	196.3	
11:44:35	8.8	984.2	8.9	525.4	196.3	
11:45:39	9.2	982.1	8.7	506.3	196.4	
11:46:43	9.3	987.0	8.6	498.0	178.5	
11:47:47	9.5	1008.1	8.5	486.0	154.2	
11:48:51	9.4	1014.7	8.4	475.6	118.8	
11:49:55	9.6	1013.0	8.0	469.8	130.0	
11:50:59						
11:52:03						
11:53:06						
11:54:11						
11:55:15						
11:56:19						
11:57:23						
11:58:27						
11:59:31						
12:00:35						
12:01:39						
12:02:43						
12:03:48						
12:04:51						
12:05:55						
12:06:59						
12:08:03						
12:09:07						
=====						
POINTS	65	65	65	65	65	0
MEAN	9.2	1194.7	8.6	544.3	206.1	0.0
STD. DEV.	1.1	336.4	0.9	78.4	28.8	0.0

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 6 05-05-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
12:14:56	5.6	2709.1	10.6	643.7	131.2	
12:16:00	5.7	2586.8	10.5	631.9	131.2	
12:17:03	5.8	2429.0	10.5	620.3	143.4	
12:18:06	5.7	2668.4	10.5	625.0	143.4	
12:19:09	5.5	2724.0	10.6	613.3	143.4	
12:20:13	5.5	2824.5	10.7	597.2	143.4	
12:21:16	5.5	2571.3	10.6	576.8	154.6	
12:22:20	5.7	2455.2	10.6	566.0	154.7	
12:23:23	5.6	2497.5	10.7	571.4	154.7	
12:24:27	5.7	2416.1	10.6	564.2	154.7	
12:25:30	5.6	2511.0	10.7	569.1	154.7	
12:26:34	5.8	2306.5	10.5	560.3	166.9	
12:27:37	6.1	1988.8	10.3	544.6	166.9	
12:28:41	6.2	1848.4	10.2	546.9	166.9	
12:29:45	6.2	1778.2	10.2	548.6	166.9	
12:30:48	6.4	1587.2	10.1	547.8	166.9	
12:31:52	6.4	1595.7	10.1	549.7	166.9	
12:32:56	6.5	1562.4	10.1	553.7	167.0	
12:33:59	6.5	1583.9	10.1	551.9	167.0	
12:35:03	6.5	1603.3	10.1	557.3	167.0	
12:36:06	6.5	1595.6	10.1	557.5	167.0	
12:37:10	6.5	1603.8	10.1	560.5	179.2	
12:38:14	6.8	1451.7	9.9	548.6	179.2	
12:39:17	6.9	1385.7	9.9	540.0	179.2	
12:40:21	7.0	1295.7	9.8	532.9	179.2	
12:41:25	7.1	1195.6	9.8	524.8	179.2	
12:42:28	7.1	1258.6	9.7	529.5	179.3	
12:43:32	6.9	1373.9	9.9	539.8	179.3	
12:44:36	6.7	1503.3	9.9	542.4	179.3	
12:45:40	6.6	1610.2	10.0	549.1	179.3	
12:46:44	6.4	1652.5	10.1	553.7	179.3	
12:47:47	6.1	1845.6	10.3	565.6	179.3	
12:48:51	6.2	1825.3	10.2	562.7	191.5	
12:49:55	6.2	1788.8	10.2	556.2	191.5	
12:50:58	6.0	1883.1	10.4	558.3	203.7	
12:52:02	6.1	2001.7	10.3	566.7	203.7	
12:53:06	6.2	1839.0	10.2	567.6	215.0	
12:54:10	6.3	1891.4	10.2	568.2	215.0	
12:55:14	6.1	1948.5	10.3	572.8	215.0	
12:56:17	6.4	1792.0	10.1	559.7	227.2	
12:57:21	6.4	1680.9	10.2	557.1	227.2	
12:58:25	6.4	1643.7	10.2	561.9	239.4	
12:59:29	6.4	1603.7	10.2	562.5	227.3	
13:00:34	6.4	1372.9	10.1	558.5	239.5	
13:01:38	6.4	1336.0	10.2	561.2	227.3	
13:02:42	6.1	1427.2	10.5	579.4	227.3	
13:03:45	6.2	1373.7	10.3	579.2	239.5	
13:04:49	6.4	1247.7	10.2	569.8	251.7	
13:05:52	6.7	1126.0	10.0	561.8	251.7	
13:06:56	6.9	1069.3	10.0	553.1	251.8	

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 6 03-05-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
13:09:03	6.9	1011.6	10.0	554.2	251.8	
13:10:07	7.0	995.4	9.8	554.8	251.8	
13:11:10	7.3	977.9	9.8	545.5	251.9	
13:12:14	7.3	955.7	9.8	545.1	251.9	
13:13:18	7.2	984.2	9.8	551.8	251.9	
13:14:21	7.5	919.8	9.7	552.4	251.9	
13:15:25	7.6	851.5	9.6	553.9	251.9	
13:16:29	7.6	873.0	9.7	555.1	252.0	
13:17:33	7.7	930.4	9.6	553.4	252.0	
13:18:36	7.8	851.9	9.5	548.8	252.0	
13:19:40	8.0	777.5	9.4	535.6	252.0	
13:20:44	8.1	773.3	9.3	521.9	252.0	
13:21:48	8.2	749.0	9.2	520.3	252.1	
13:22:52	8.5	730.7	9.0	507.0	239.9	
13:23:55	8.8	704.6	8.8	501.3	227.7	
13:24:59	9.1	669.0	8.7	491.9	227.7	
13:26:03	9.3	652.8	8.6	476.8	215.6	
13:27:07	9.4	643.2	8.5	463.2	215.6	
13:28:10	9.4	683.1	8.5	456.7	215.6	
13:29:14	9.4	688.0	8.4	459.0	215.6	
13:30:18	9.6	676.0	8.3	448.3	215.6	
13:31:22	9.7	669.3	8.3	438.6	215.7	
13:32:26						
13:33:30						
13:34:34						
13:35:38	9.7	690.5	8.4	367.7	192.3	
13:36:42	9.4	717.6	8.6	452.9	192.3	
13:37:45	9.3	768.4	8.6	474.7	192.3	
13:38:49	9.4	774.8	8.6	471.9	192.3	
13:39:53	9.7	768.1	8.3	466.2	192.3	
13:40:57	10.4	688.3	7.9	450.9	204.6	
13:42:02	10.6	690.4	7.7	435.4	204.6	
13:43:05	10.8	682.7	7.6	425.4	215.9	
13:44:09	10.8	675.6	7.5	419.9	204.6	
13:45:13	10.8	677.0	7.5	416.7	204.6	
13:46:18	11.0	682.3	7.4	407.5	180.2	
13:47:22	11.1	671.0	7.3	402.2	155.8	
13:48:26	11.3	623.7	7.2	392.9	132.4	
13:49:29						
13:50:33						
13:51:37						
13:52:40	10.3	763.2	8.0	618.0	168.1	
13:53:44	10.2	766.7	8.0	503.6	168.1	
13:54:47	10.3	752.2	8.0	487.3	168.2	
13:55:51	10.2	755.0	8.1	487.0	168.2	
13:56:54	10.1	761.1	8.2	489.4	168.2	
13:57:58	9.9	771.3	8.4	493.5	168.2	
13:59:01	9.8	772.4	8.4	492.5	168.2	
14:00:05	9.7	994.2	8.4	494.9	168.2	

POINTS	94	94	94	94	94	0
MEAN	7.6	1331.4	D-73 9.5	529.6	198.1	0.0
STD. DEV.	1.7	627.6	1.0	55.9	36.2	0.0

SEWAGE SLUDGE -JACKSONVILLE. FL DAY 6 05-05-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
14:04:59	9.9	762.5	8.3	504.1	168.2	
14:06:02	10.1	764.2	8.2	501.2	168.3	
14:07:05	9.9	824.3	8.4	516.8	168.3	
14:08:08	9.7	816.2	8.5	531.8	168.3	
14:09:11	9.8	770.6	8.4	520.4	168.3	
14:10:15	10.1	749.1	8.1	512.3	168.3	
14:11:18	10.4	730.7	7.9	505.0	168.3	
14:12:22	10.7	742.3	7.7	490.3	168.3	
14:13:25	10.6	805.3	8.1	510.1	168.4	
14:14:29	10.1	920.9	8.3	538.5	168.4	
14:15:32	10.0	880.2	8.2	540.1	168.4	
14:16:36	10.2	808.5	8.1	525.4	168.4	
14:17:39	10.3	797.5	8.1	522.7	168.4	
14:18:43	10.3	787.3	8.3	525.1	168.4	
14:19:47	10.1	820.2	8.3	529.3	168.4	
14:20:50	10.2	782.0	8.3	521.4	168.5	
14:21:54	10.2	763.9	8.4	517.4	168.5	
14:22:58	10.1	775.3	8.6	529.2	168.5	
14:24:01	9.9	800.4	8.6	532.0	168.5	
14:25:05	10.2	746.3	8.1	506.1	168.5	
14:26:08	10.6	762.9	7.9	481.3	168.5	
14:27:12	10.8	764.3	7.9	475.6	168.6	
14:28:15	10.6	798.3	8.1	486.3	168.6	
14:29:19	10.5	837.5	8.2	498.8	168.6	
14:30:23	10.3	900.5	8.4	513.6	168.6	
14:31:27						
14:32:30						
14:33:34						
14:34:38						
14:35:42						
14:36:46						
14:37:49						
14:38:53						
14:39:56						
14:41:00						
14:42:04						
14:43:08						
14:44:12						
14:45:15						
14:46:19						
14:47:23						
14:48:27						
14:49:31						
14:50:35						
14:51:39						
14:52:43						
14:53:47						
14:54:51						
14:55:54						
14:56:57						
14:58:01						

SEWAGE SLUDGE -JACKSONVILLE. FL DAY 6 05-05-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
14:59:05						
15:00:09						
15:01:12						
15:02:16						
15:03:20						
15:04:23						
15:05:27						
15:06:31						
15:07:35						
15:08:38						
15:09:42						
15:10:46						
15:11:50						
15:12:53						
15:13:57						
15:15:01						
15:16:05						
15:17:08	12.2	777.2	8.1	392.4	157.0	
15:18:12	10.3	859.2	8.2	484.4	157.0	
15:19:16	10.2	863.5	8.3	473.8	157.0	
15:20:20	10.1	830.8	8.3	466.6	169.3	
15:21:24	10.1	819.5	8.3	459.8	169.3	
15:22:28	9.9	895.1	8.5	471.4	169.3	
15:23:32	9.6	972.8	8.7	487.2	169.3	
15:24:36	9.4	1134.7	9.0	521.9	169.4	
15:25:39	9.1	1057.4	9.0	534.8	169.4	
15:26:43	9.5	853.6	8.6	495.2	169.4	
15:27:47	9.8	831.2	8.6	474.3	169.4	
15:28:51	9.5	873.1	8.7	487.1	169.4	
15:29:55	9.4	939.6	8.8	500.1	169.4	
15:30:59	9.4	880.6	8.8	505.4	169.4	
15:32:03	9.8	796.1	8.4	476.2	169.5	
15:33:07	10.2	760.9	8.2	454.2	169.5	
15:34:11	10.2	765.9	8.3	458.2	169.5	
15:35:15	10.1	796.8	8.2	460.9	169.5	
15:36:19	10.2	837.3	8.2	460.8	169.5	
15:37:23	10.1	908.4	8.4	469.6	169.5	
15:38:27	9.7	967.0	8.6	487.7	169.5	
15:39:31	9.6	892.4	8.7	498.7	169.6	
15:40:34	9.9	791.9	8.4	476.7	169.6	
15:41:38	10.0	789.7	8.4	469.4	169.6	
15:42:42	9.9	849.1	8.5	475.6	169.6	
15:43:45	7.8	854.1	8.4	476.6	169.6	
15:44:49	8.9	781.6	8.1	464.4	169.6	
15:45:53	8.9	815.0	8.3	467.2	169.6	
15:46:56	9.5	861.6	8.3	475.9	169.7	
15:48:00	10.2	806.8	8.3	471.7	169.7	
15:49:03	9.9	846.3	8.6	487.2	169.7	
15:50:07	9.8	855.2	8.6	499.9	169.7	
15:51:11	9.7	842.8	8.7	497.0	169.7	
15:52:14	9.5	867.7	8.8	515.7	169.7	
15:53:18	9.2	933.8	9.1	532.5	169.8	
15:54:22	8.9	902.2	9.3	550.8	169.8	
15:55:26	9.2	797.6	9.0	533.6	169.8	
15:56:29	9.4	805.1	8.9	514.9	169.8	
15:57:33						

SEWAGE SLUDGE -JACKSONVILLE. FL DAY 6 05-05-87

	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
POINTS	63	63	63	63	63	0
MEAN	9.9	835.3	8.4	496.3	168.5	0.0
STD.DEV.	0.6	73.6	0.3	28.2	2.6	0.0

SEWAGE SLUDGE - JACKSONVILLE. FL DAY 6 05-05-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
16:03:16	8.7	836.8	8.5	473.7	169.8	
16:04:19	9.6	931.8	8.8	504.7	169.8	
16:05:22	9.5	907.2	8.8	513.1	169.8	
16:06:25	9.7	847.1	8.7	499.9	169.9	
16:07:29	9.8	779.1	8.7	495.8	169.9	
16:08:32	9.6	894.1	8.8	498.4	169.9	
16:09:36	9.7	888.8	8.7	502.1	182.2	
16:10:39	10.0	774.5	8.5	480.0	182.2	
16:11:43	10.2	751.8	8.4	468.2	182.2	
16:12:46	10.2	749.3	8.3	467.0	182.3	
16:13:50	10.2	754.6	8.4	468.9	182.3	
16:14:53	10.2	731.8	8.4	466.2	182.3	
16:15:57	9.9	855.4	8.6	491.6	182.3	
16:17:00	9.9	802.0	8.6	493.1	182.3	
16:18:04	10.0	762.5	8.5	484.7	182.3	
16:19:08	10.2	755.7	8.3	469.5	182.3	
16:20:12	10.2	756.0	8.3	466.1	182.4	
16:21:15	10.5	757.8	8.2	460.2	182.4	
16:22:19	10.5	726.5	8.2	460.4	182.4	
16:23:22	10.3	760.3	8.3	471.0	182.4	
16:24:26	10.5	757.8	8.1	461.1	182.4	
16:25:29	10.7	767.5	8.0	449.8	182.4	
16:26:33	10.6	805.9	8.0	450.6	170.1	
16:27:37	10.6	829.5	8.0	452.6	170.2	
16:28:41	10.5	818.8	8.1	461.0	170.2	
16:29:44	10.5	802.0	8.1	461.9	170.2	
16:30:48						
16:31:52						
16:32:55						
16:33:59						
16:35:03	10.3	790.3	8.3	435.1	157.9	
16:36:07	10.2	762.1	8.3	455.3	158.0	
16:37:11	10.3	760.4	8.3	454.7	158.0	
16:38:14	10.4	757.2	8.2	453.6	158.0	
16:39:18	10.5	758.9	8.1	446.9	158.0	
16:40:22	10.6	803.5	8.4	460.6	158.0	
16:41:26	10.5	802.0	8.5	479.0	158.0	
16:42:29	10.4	802.2	8.4	468.4	170.4	
16:43:33	10.6	826.7	8.5	473.4	170.4	
16:44:37	10.1	780.7	8.4	467.1	170.4	
16:45:40	10.2	749.0	8.4	462.7	170.4	
16:46:45	10.2	759.0	8.3	463.9	170.4	
16:47:49	10.2	757.2	8.3	461.2	170.4	
16:48:53	10.3	772.5	8.3	457.9	170.5	
16:49:57	10.3	820.3	8.2	457.4	170.5	
16:51:01	10.5	812.5	8.1	449.4	170.5	
16:52:05	10.5	776.5	8.1	447.7	170.5	
16:53:08	10.2	809.6	8.3	461.6	170.5	
16:54:12	9.9	883.9	8.6	474.8	170.5	
16:55:15	9.8	835.7	8.6	485.5	170.5	

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 6 05-05-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
16:57:22	9.7	843.2	8.8	486.3	170.6	
16:58:26	9.4	875.0	8.9	508.6	170.6	
16:59:30	9.3	833.6	8.9	509.3	170.6	
17:00:33						
17:01:37						
17:02:41						
17:03:44						
17:04:48	9.9	757.2	8.6	442.2	183.0	
17:05:52	9.8	782.6	8.6	462.3	183.0	
17:06:56	9.8	730.8	8.6	468.7	183.1	
17:08:00	10.0	739.0	8.5	461.2	183.1	
17:09:04	10.0	780.4	8.5	463.1	183.1	
17:10:07	10.1	789.7	8.4	457.6	183.1	
17:11:11	10.5	732.6	8.1	439.3	183.1	
17:12:15	10.7	709.4	7.9	423.2	183.1	
17:13:19	10.7	733.7	8.0	431.5	183.1	
17:14:22	10.5	758.7	8.1	438.7	170.8	
17:15:26	10.4	773.0	8.2	449.0	170.8	
17:16:30	10.2	778.3	8.3	459.4	170.8	
17:17:33	10.0	816.9	8.5	466.8	170.9	
17:18:37	9.9	805.1	8.6	475.3	170.9	
17:19:41	10.0	779.1	8.5	472.5	170.9	
17:20:45	10.2	795.5	8.4	463.3	170.9	
17:21:49	10.3	819.5	8.2	457.8	170.9	
17:22:53	10.4	806.2	8.1	449.3	170.9	
17:23:57	10.3	810.9	8.2	455.0	171.0	
17:25:01	10.3	819.1	8.3	458.2	171.0	
17:26:04	10.1	810.5	8.3	463.9	171.0	
17:27:08	10.2	786.2	8.3	461.9	171.0	
17:28:12	10.2	763.0	8.2	459.2	171.0	
17:29:16	10.4	782.0	8.1	456.6	171.0	
17:30:20						
17:31:24						
17:32:28						
17:33:32						
17:34:36	10.6	766.9	7.9	410.3	171.1	
17:35:41	10.7	768.7	7.9	424.4	171.1	
17:36:44	10.3	844.2	8.2	443.2	171.1	
17:37:48	10.4	813.1	8.1	446.8	171.1	
17:38:52	10.5	829.6	8.1	442.3	171.2	
17:39:55	10.3	832.1	8.3	454.3	171.2	
17:40:59	10.1	813.9	8.3	463.4	171.2	
17:42:03	10.3	777.7	8.3	452.3	171.2	
17:43:07	10.2	798.1	8.4	458.4	171.2	
17:44:10	10.1	766.6	8.3	460.3	171.2	
17:45:13	10.2	762.0	8.3	456.9	171.3	
17:46:17	10.2	757.7	8.4	456.4	171.3	
17:47:20	10.5	726.5	8.0	442.6	171.3	
17:48:24	10.7	746.2	7.9	431.4	171.3	
17:49:27	10.4	769.1	8.2	443.9	171.3	
17:50:31	10.1	785.3	8.4	466.8	171.3	
17:51:35	10.1	762.3	8.4	468.4	171.3	
17:52:39	10.0	790.6	8.4	474.5	171.4	
17:53:43	9.8	827.9	8.6	480.8	171.4	
17:54:46	10.0	764.1	8.5	469.9	171.4	
17:55:50	10.0	770.2	8.4	464.0	171.4	

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 6 05-05-87

	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
POINTS	95	95	95	95	95	0
MEAN	10.2	791.0	8.3	463.3	172.9	0.0
STD. DEV	0.3	42.6	0.2	18.7	6.7	0.0

SEWAGE SLUDGE - JACKSONVILLE. FL DAY 6 05-05-87

TIME	CO2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
18:02:55	18.8	187.4	2.5	131.0	171.4	
18:03:58	11.0	850.8	8.1	355.0	171.4	
18:05:01	10.1	880.9	8.3	440.4	171.4	
18:06:05	10.1	870.2	8.3	448.3	171.4	
18:07:08	10.1	830.1	8.4	451.5	171.4	
18:08:12	10.1	834.4	8.3	454.6	171.4	
18:09:15	10.3	765.6	8.1	446.5	171.4	
18:10:19	10.5	765.2	8.1	433.3	171.4	
18:11:22	10.0	830.1	8.5	461.0	171.4	
18:12:25	9.8	830.1	8.6	476.1	171.4	
=====						
POINTS	10	10	10	10	10	0
MEAN	11.1	764.5	7.7	409.8	171.4	0.0
STD. DEV.	2.6	195.7	1.8	97.9	0.0	0.0

SEWAGE SLUDGE - JACKSONVILLE. FL DAY 7 05-06-8.

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
10:10:46	10.6	844.0	7.9	557.5	169.0	
10:11:49	10.8	833.0	7.6	549.1	169.0	
10:12:52	11.0	858.7	7.5	535.1	169.0	
10:13:56	10.8	846.3	7.8	549.6	169.0	
10:14:59	10.7	840.5	7.8	560.5	169.1	
10:16:02	11.0	833.0	7.6	544.5	169.1	
10:17:06	10.9	862.7	7.7	546.0	169.1	
10:18:09	10.7	899.0	7.9	563.4	169.2	
10:19:13	10.8	871.7	7.8	559.9	169.2	
10:20:16	10.8	844.1	7.6	548.7	169.2	
10:21:20	10.8	876.6	7.8	552.1	169.3	
10:22:23	10.8	862.0	7.7	550.5	169.3	
10:23:27	10.7	879.2	7.8	554.4	181.1	
10:24:30	10.5	880.6	8.0	573.3	181.2	
10:25:34	10.4	1039.5	8.1	572.6	193.0	
10:26:38	10.1	1350.7	8.2	590.8	193.1	
10:27:42	10.0	1381.7	8.2	608.2	181.3	
10:28:46	10.1	1188.0	8.3	601.4	181.3	
10:29:49	9.5	1577.2	8.7	650.2	193.2	
10:30:53	9.2	1973.3	8.7	682.8	169.5	
10:31:57						
10:33:00						
10:34:04						
10:35:08	10.0	1440.6	8.2	561.8	181.5	
10:36:12	10.1	1427.8	8.2	566.0	181.6	
10:37:15	9.8	1507.8	8.4	590.4	181.6	
10:38:19	9.7	1574.7	8.5	610.2	181.6	
10:39:22	9.6	1421.1	8.5	607.1	181.7	
10:40:26	9.8	1248.4	8.4	586.1	181.7	
10:41:30	9.9	1193.2	8.4	574.7	181.8	
10:42:33	9.7	1230.9	8.5	592.3	181.8	
10:43:37	9.8	1177.9	8.4	584.4	181.8	
10:44:40	10.3	1004.5	8.0	550.9	181.9	
10:45:44	10.4	1036.2	8.0	543.9	181.9	
10:46:47	10.2	1158.4	8.2	558.0	181.9	
10:47:50	9.8	1317.5	8.3	586.6	182.0	
10:48:54	9.8	1389.7	8.4	593.5	182.0	
10:49:58	9.8	1203.4	8.5	599.8	182.0	
10:51:01	10.0	985.1	8.4	577.7	182.1	
10:52:05	9.6	1140.1	8.7	608.6	182.1	
10:53:08	9.5	1101.2	8.7	616.7	182.1	
10:54:12	9.7	960.5	8.5	599.1	182.2	
10:55:16	9.8	979.1	8.5	587.0	182.2	
10:56:20	10.1	944.5	8.3	575.6	182.3	
10:57:23	10.7	791.1	7.7	537.0	182.3	
10:58:27	11.2	768.5	7.4	498.3	182.3	
10:59:31	11.1	767.0	7.5	507.3	182.4	
11:00:34						
11:01:38						
11:02:41						

SEWAGE SLUDGE - JACKSONVILLE. FL DAY 7 05-06-87

TIME	O2 (%)	CO (PPMV)	CO2 (%)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
11:04:48	10.4	1160.1	8.0	516.6	170.6	
11:05:52	10.3	1001.9	8.1	534.4	170.6	
11:06:55	10.6	826.5	7.8	512.9	170.6	
11:07:59	10.6	815.5	7.9	505.4	170.7	
11:09:02	10.2	1022.4	8.2	535.2	170.7	
11:10:06	10.0	1047.7	8.2	544.5	170.7	
11:11:10	10.2	925.5	8.1	536.6	170.8	
11:12:13	10.6	814.2	7.6	505.3	182.8	
11:13:17	10.9	802.1	7.5	488.2	182.8	
11:14:21	10.9	856.6	7.5	491.5	182.9	
11:15:24	10.9	965.6	7.5	499.8	182.9	
11:16:28	10.7	1028.9	7.7	516.7	183.0	
11:17:32	10.6	1096.4	7.8	533.7	171.0	
11:18:36	10.5	1107.5	7.9	539.8	171.0	
11:19:40	10.6	997.0	7.8	532.4	171.0	
11:20:43	10.7	914.6	7.7	515.8	171.1	
11:21:47	10.7	1010.2	7.7	513.0	171.1	
11:22:51	10.4	1081.5	7.9	531.6	171.1	
11:23:54	10.4	1018.5	7.9	535.1	183.2	
11:24:58	10.7	952.0	7.7	513.4	183.2	
11:26:02	10.7	934.3	7.7	527.1	183.3	
11:27:06	10.7	883.6	7.8	528.4	183.3	
11:28:09	10.3	1018.9	8.0	548.9	183.4	
11:29:13	10.3	929.9	8.0	548.2	183.4	
11:30:17	10.5	799.0	7.8	533.2	183.4	
11:31:20	10.5	829.2	7.9	533.1	195.6	
11:32:24						
11:33:28						
11:34:31						
11:35:35						
11:36:39	10.4	1002.1	7.9	437.2	183.7	
11:37:43	10.3	963.4	7.9	487.8	183.7	
11:38:47	10.4	1004.0	7.8	498.1	183.7	
11:39:51	10.9	831.2	7.5	493.5	183.8	
11:40:55	11.0	819.2	7.4	485.9	195.9	
11:41:59	10.8	902.7	7.6	493.0	196.0	
11:43:04	10.7	884.7	7.7	497.2	183.9	
11:44:07	10.7	886.0	7.6	495.5	183.9	
11:45:11	10.4	1059.6	7.9	525.5	196.1	
11:46:14	10.3	1046.3	8.0	535.5	184.0	
11:47:18	10.6	926.5	7.7	519.0	184.0	
11:48:22	10.7	887.2	7.7	507.8	184.1	
11:49:25	10.4	914.5	7.9	526.6	184.1	
11:50:29	10.5	891.6	7.9	532.3	184.1	
11:51:33	10.6	877.8	7.8	524.2	184.2	
11:52:36	10.4	964.1	7.9	531.8	184.2	
11:53:40	10.5	975.9	7.8	534.8	184.3	
11:54:44	10.6	872.0	7.8	529.0	184.3	
11:55:47	10.5	829.2	7.8	533.8	184.3	
11:56:52	10.6	891.9	7.8	530.2	184.4	
11:57:55	10.5	876.0	7.9	534.8	184.4	
11:58:59	10.3	908.9	8.0	545.3	184.4	
12:00:03	10.6	887.1	7.8	532.9	196.7	

D-82

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 7 05-06-87

	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
MEAN	10.4	1011.1	8.0	543.7	180.2	0.0
STD. DEV.	0.4	212.9	0.3	41.6	7.3	0.0

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 7 05-06-87

TIME	O2 (%V)	CO (PPMV)	CO2 (%V)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
=====	=====	=====	=====	=====	=====	=====
	A	B	C	D	E	F
12:03:04						
12:04:07	10.5	898.4	7.9	481.9	184.5	
12:05:10	10.5	819.3	7.9	509.8	184.5	
12:06:14	10.4	928.5	7.9	525.0	184.6	
12:07:17	10.3	1025.8	8.0	538.0	184.6	
12:08:20	10.3	982.4	8.0	540.3	184.6	
12:09:24	10.4	919.7	8.0	530.2	184.7	
12:10:27	10.3	956.0	8.0	530.6	184.7	
12:11:31	10.3	942.1	8.0	539.4	184.7	
12:12:34	10.5	911.3	7.8	523.9	184.8	
12:13:38	10.4	1007.0	7.9	527.8	184.8	
12:14:41	10.4	973.8	7.9	534.5	184.8	
12:15:45	10.3	965.8	8.0	541.5	197.1	
12:16:48	10.2	1113.9	8.1	552.9	197.2	
12:17:52	10.1	1098.6	8.1	557.5	197.2	
12:18:56	10.1	879.0	8.2	551.4	197.2	
12:20:00	9.9	973.4	8.3	563.2	197.3	
12:21:03	9.9	971.4	8.3	567.6	197.3	
12:22:07	10.0	964.5	8.2	562.6	197.3	
12:23:10	9.9	1029.0	8.3	567.7	209.6	
12:24:14	10.3	884.5	8.0	553.0	209.7	
12:25:18	10.5	870.6	7.9	531.0	209.7	
12:26:21	10.5	892.5	7.9	531.8	209.8	
12:27:25	10.7	812.0	7.8	521.3	209.8	
12:28:29	10.8	750.4	7.7	507.2	209.8	
12:29:32	11.0	719.5	7.5	497.7	197.6	
12:30:36						
12:31:40						
12:32:43						
12:33:47	11.3	702.2	7.3	416.6	197.7	
12:34:51	11.0	693.8	7.4	447.0	197.8	
12:35:55	11.0	717.9	7.3	454.4	197.8	
12:36:59	10.9	722.9	7.5	477.3	197.8	
12:38:02	10.8	727.3	7.6	489.1	197.9	
12:39:06	11.0	720.6	7.5	495.7	197.9	
12:40:10	11.1	722.7	7.4	493.7	210.3	
12:41:14	11.3	675.0	7.3	486.2	210.3	
12:42:17	11.3	708.2	7.3	483.7	210.4	
12:43:21	11.4	688.1	7.2	475.2	198.1	
12:44:25	11.5	680.1	7.2	479.5	198.1	
12:45:29	11.4	679.4	7.3	487.8	198.1	
12:46:33	11.3	675.6	7.3	492.8	198.2	
12:47:37	11.3	672.2	7.3	491.6	185.8	
12:48:41	11.1	633.7	7.5	499.8	198.2	
12:49:45	11.3	629.9	7.3	497.8	198.3	
12:50:49	11.5	664.6	7.2	490.7	198.3	
12:51:53	11.8	687.7	6.9	464.7	234.5	
12:52:56	11.8	680.7	6.9	462.3	198.4	
12:54:00	11.8	691.0	6.8	455.7	198.4	
12:55:03	11.7	691.5	7.1	467.1	186.1	
12:56:07	11.5	677.7	7.3	486.2	186.1	

SEWAGE SLUDGE - JACKSONVILLE, FL DAY 7 05-06-87

TIME	O2 (%)	CO (PPMV)	CO2 (%)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
12:57:11	11.2	648.4	7.5	504.7	186.1	
12:58:14	11.3	645.3	7.3	503.5	186.2	
12:59:18	11.6	674.8	7.2	494.9	186.2	
13:00:22						
13:01:25						
13:02:29						
13:03:33						
13:04:37	11.4	694.7	7.4	479.2	198.9	
13:05:40	11.6	682.3	7.2	479.1	198.8	
13:06:44	11.7	675.7	7.0	465.4	198.9	
13:07:48	11.9	702.7	6.8	452.3	198.9	
13:08:51	12.0	731.2	6.8	444.5	198.9	
13:09:55	12.1	732.0	6.7	441.1	199.0	
13:10:59	12.3	754.8	6.5	437.3	186.6	
13:12:03	12.5	768.4	6.3	431.6	186.6	
13:13:07	12.2	763.2	6.6	443.5	186.6	
13:14:11	11.9	759.0	6.9	468.6	186.7	
13:15:14	11.7	743.4	7.1	489.3	186.7	
13:16:18	11.8	738.9	6.9	480.9	186.7	
13:17:22	11.7	740.1	7.0	482.8	186.8	
13:18:25	11.6	736.6	7.1	489.7	186.8	
13:19:30	11.4	736.0	7.3	501.7	186.8	
13:20:34	11.0	740.3	7.7	526.5	186.9	
13:21:38	10.6	740.8	8.0	550.9	186.9	
13:22:42	10.5	705.3	8.1	560.9	186.9	
13:23:45	10.3	712.5	8.3	565.5	187.0	
13:24:49	10.2	697.3	8.4	577.2	187.0	
13:25:53	10.1	720.5	8.4	581.6	187.0	
13:26:57	10.2	734.8	8.3	577.8	187.1	
13:28:01	10.6	723.5	8.0	560.5	187.1	
13:29:05	11.0	730.7	7.6	524.2	187.1	
13:30:09	11.3	731.9	7.3	495.9	187.2	
13:31:13						
13:32:17						
13:33:21						
13:34:26						
13:35:30						
13:36:34	11.3	732.8	7.3	461.5	174.8	
13:37:38	11.4	731.1	7.3	475.7	174.8	
13:38:41	11.4	744.7	7.2	482.5	174.9	
13:39:45	11.3	775.2	7.3	494.0	174.9	
13:40:49	11.4	772.8	7.3	499.6	174.9	
13:41:52	11.3	761.4	7.4	503.2	187.5	
13:42:56	11.0	796.2	7.6	520.4	175.0	
13:44:00	11.0	790.6	7.6	530.6	182.8	
13:45:03	11.0	769.6	7.6	529.9	175.0	
13:46:07	11.0	764.3	7.6	525.5	175.1	
13:47:10	11.0	766.5	7.6	535.9	175.1	
13:48:14	11.0	763.1	7.5	526.2	175.1	
13:49:18	11.1	758.2	7.6	527.6	175.2	
13:50:21	11.0	760.7	7.6	528.5	175.2	
13:51:25	11.0	773.7	7.6	536.3	175.2	
13:52:29	11.0	778.8	7.6	535.7	175.3	
13:53:32	11.0	801.5	7.6	539.8	175.3	
13:54:36	11.0	778.0	7.5	539.5	175.3	
13:55:40	11.1	820.3	7.5	532.0	213.2	

SEWAGE SLUDGE - JACKSONVILLE. FL DAY 7 05-06-87

TIME	O2 (%)	CO (PPMV)	CO2 (%)	SO2 (PPMV)	NOX (PPMV)	THC (PPMV)
13:56:44	11.0	882.4	7.6	540.1	175.4	
13:57:47	10.9	864.6	7.6	552.4	175.4	
13:58:51	11.0	837.1	7.6	545.5	175.4	
13:59:55	10.9	850.1	7.7	555.8	175.5	
14:00:58						
14:02:02						
14:03:06						
14:04:10	10.5	844.1	8.2	524.7	188.2	
14:05:14	10.5	817.3	8.0	563.5	188.3	
14:06:17	10.8	784.4	7.9	554.1	188.3	
14:07:21	10.6	771.6	8.0	561.3	188.3	
14:08:25	10.6	757.0	8.0	566.6	188.4	
14:09:28	10.5	763.5	8.1	573.9	188.4	
14:10:32	10.8	751.8	7.8	570.3	188.4	
14:11:36	10.8	737.5	7.8	562.9	188.5	
14:12:40	10.8	738.3	7.9	575.2	188.5	
14:13:44	10.9	738.4	7.7	566.7	188.5	
=====						
POINTS	108	108	108	108	108	0
MEAN	11.0	781.3	7.6	514.2	190.1	0.0
STD. DEV.	0.6	103.7	0.4	39.2	11.0	0.0

APPENDIX E
XAD PREPARATION AND QC CHECKS

Sewage Sludge Incinerator (Jacksonville), April 28, 1987
XAD-2 Preparation and QC check

I. PROCEDURE

The giant Soxhlet apparatus was initially washed with soap and warm water, rinsed with distilled water and finally rinsed with methanol, methylene chloride and hexane.

The XAD-2 resin was soaked in distilled water over a period of days to remove the bulk of the salts that are used as preserving agents for the resin during packaging and storage. The resin was next transferred to the giant Soxhlet extractor and the following cleanup steps were initiated:

<u>Solvent</u> *	<u>Time</u>	<u>Volume</u>
Methanol	24 hours	8 liters
Methylene Chloride	24 hours	8 liters
Methylene Chloride(fresh)	24 hours	8 liters

*All solvents were Pesticide Grade.

The filters were extracted with the resin. The TCO calculated for the resin include TCO that would have resulted from the filter extraction also.

At the conclusion of the Soxhlet extractions, a 100 mL aliquot of the final solvent rinse (MeCl₂) was concentrated using a Kuderna-Danish (KD) apparatus to 5.9 mL. A 1.0 uL portion of the concentrated MeCl₂ was injected in to the Varian 3700 GC/FID for determination of Total Chromatographable Organics (TCO). Quantitation of this extract was accomplished by using a standard mixture of n-hydrocarbons that covered the TCO range of boiling points, 100 C (C₇ - bp 98 C) to 300 C (C₁₇ - bp 303 C). The integration of the detector response began at the retention time of n-heptane (C₇), and terminated at the retention time of n-heptadecane (C₁₇), but did not include these specific peaks in the quantitative calibration. The results of the TCO analysis are reported as milligrams of TCO per resin weight (g), corresponding to the total quantity of material in the 100 C to 300 C boiling range in the original sample fraction.

II. TCD STANDARD PREPARATION

1 mL of the following n-alkanes were added to a 100 mL volumetric flask and diluted to volume with hexane:

<u>Name</u>	<u>Density (g/mL at 20 C)</u>
Heptane (C ₇)	0.6837
Decane (C ₁₀)	0.7300
Dodecane (C ₁₂)	0.7487
Tetradecane (C ₁₄)	0.7628
Heptadecane (C ₁₆)	0.7780

Stock Solution = C₁₀ + C₁₂ + C₁₄ = 22.415 mg/mL

III. INSTRUMENTAL CONDITIONS

Column:	SPB-5 0.25 mm x 30 m capillary column.
Detector:	Flame Ionization
Programmed Oven Temperature:	Initial 50 C for 5 min. Ramp 20 C/min. Final 250 C/hold for 0 min.
Injector Temperature:	250 C
Ionization Block Temperature:	300 C
Gas Flow Rates:	On-column N ₂ at 2 mL/min. H ₂ at 30 mL/min. air at 300 mL/min. 1.0 mL
Retention time for C ₇ :	1.9 min.
Retention time for C ₁₇ :	13.2 min.

IV. TCO CALCULATIONS

The following calculations determine the TCO value for the XAD-2 resin:

(conc. of std./std. area counts) x (area counts of sample/amt. of sample injected) = ug/uL TCO

ug/uL TCO x uL of concentrate (5900 uL) = ug TCO

ug TCO/mL of starting volume (100 mL) = ug/mL TCO

ug/mL TCO x total volume of solvent used in the extraction (8000 mL) = total ug of TCO in XAD-2.

ug of total TCO/XAD-2 weight total (g) = total ug/g TCO in XAD-2.

ACTUAL CALCULATION:

TCO STANDARD:

<u>Amount of Injection</u>	<u>Area Counts</u>
1.0 uL TCO	1334200
1.0 uL TCO	1255220

AVG. AC/uL = 1294710

22.415 ug/uL / 1294710 AC = 1.7312747×10^{-5} ug/AC.

XAD-2 TCO calculation:

$(1.7312747 \times 10^{-5} \text{ ug/AC}) \times (2266 \text{ AC/1.0 uL}) = 0.039230708 \text{ ug/uL TCO.}$

$0.039230708 \text{ ug/uL} \times 5900 \text{ uL} = 231.46118 \text{ ug TCO.}$

$231.46118 \text{ ug/100 mL} = 2.3146118 \text{ ug/mL TCO.}$

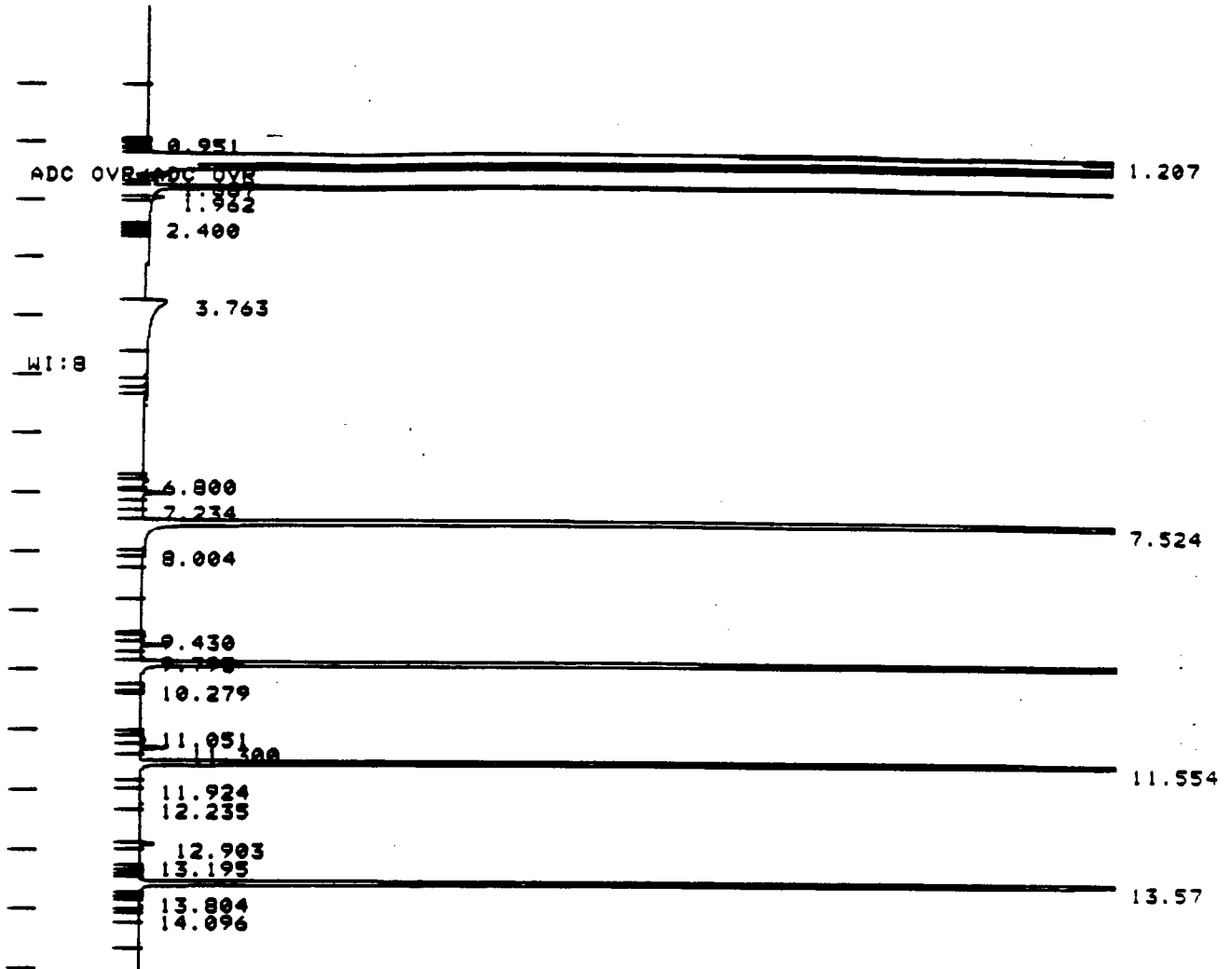
$2.3146118 \text{ ug/mL} \times 8000 \text{ mL} = 1.8516894 \times 10^4 \text{ ug TCO.}$

$1.8516894 \times 10^4 \text{ ug/1000 g} = 18.52 \text{ ug/g TCO in XAD-2 resin.}$

(Maximum allowable according to method is 25 ug/g TCO in XAD-2 resin.)

ENCLOSED ARE COPIES OF CHROMATOGRAMS FOR THE ABOVE THREE INJECTIONS.

CHART SPEED 1.0 CM/MIN
ATTEN: 32 ZERO: 5% 1 MIN/TICK



TITLE: TCO IN XAD-2

15:54 27 APR 87

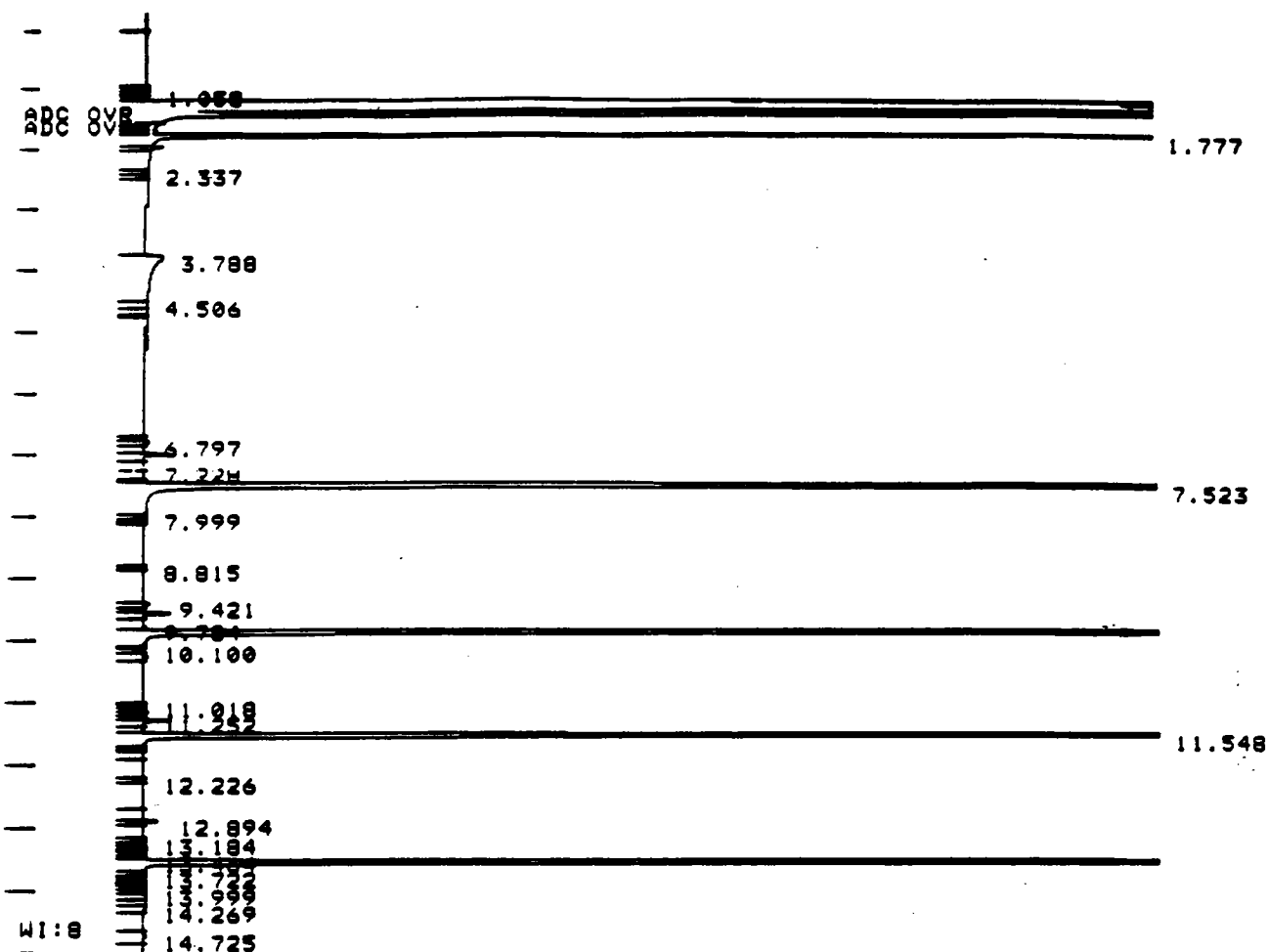
CHANNEL NO: 1

SAMPLE: STD 8706 *ind*

METHOD: TCO

PEAK NO	PEAK NAME	RESULT	TIME (MIN)	AREA COUNTS	SEP CODE
1		0.5429	1.207	50132	VV
2		4.2546	1.250	392847	VV
3		49.3080	1.287	4552790	VV
4		22.3950	1.420	2067820	VV
5		4.4213	1.772	408239	VV
6		0.0030	1.962	347	T
7		14.4497	7.650	1334200	G
8		4.6246	13.571	427009	VV
TOTALS:		99.9999		9233380	

Figure E-1. TCO Standard Chromatogram (Rep 1)



TITLE: TCO IN XAD-2

16:15 27 APR 87

CHANNEL NO: 1

SAMPLE: STD #706 *led*

METHOD: TCO

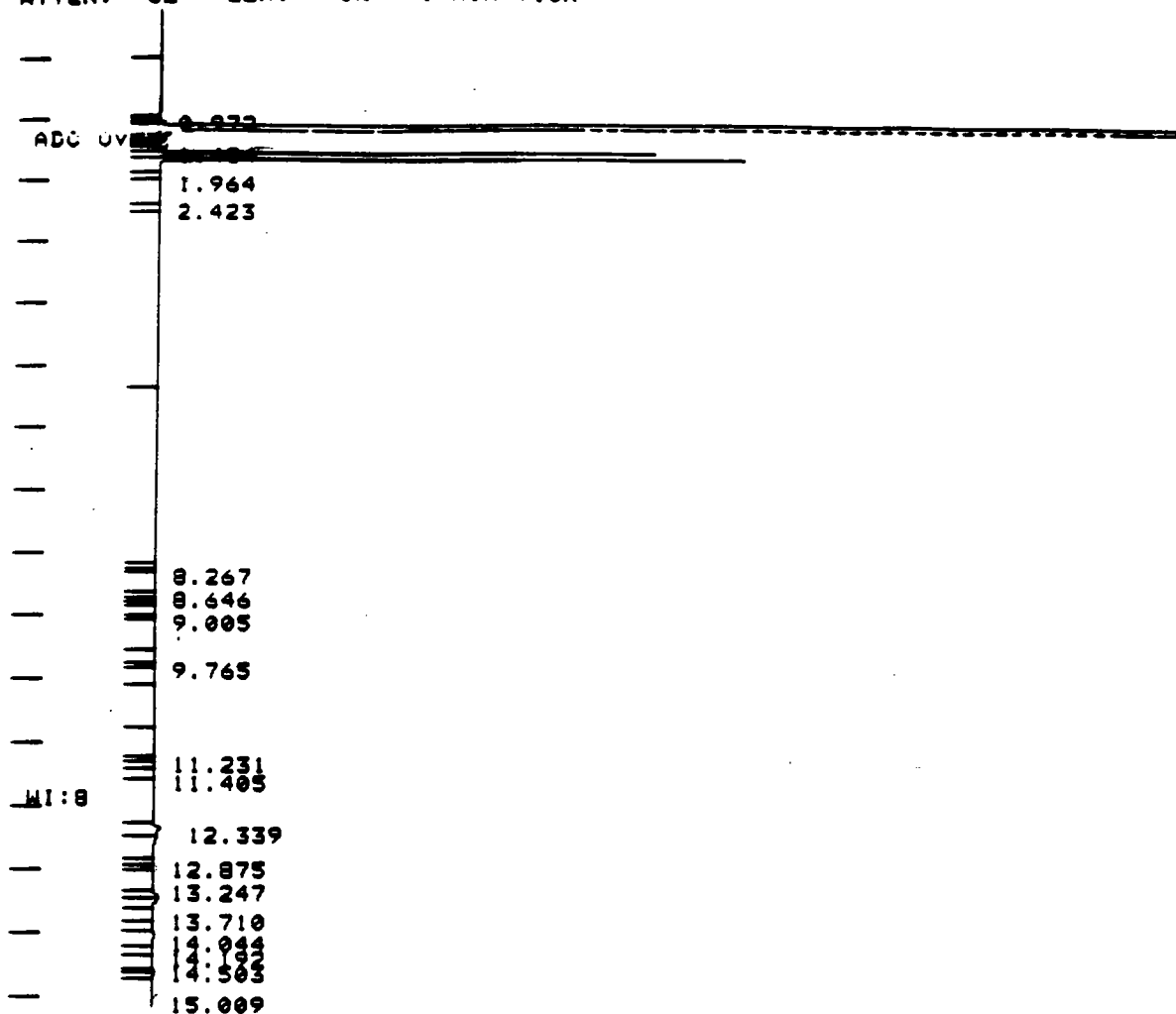
PEAK NO	PEAK NAME	RESULT	TIME (MIN)	AREA COUNTS	SEP CODE
1		0.5423	1.209	50002	VV
2		3.7941	1.252	349837	VV
3		50.7943	1.287	4603540	VV
4		22.8143	1.422	2103610	VV
5		4.2328	1.777	390293	VV
6		0.0036	1.968	333	T
7		13.6132	7.650	1255220	G
8		4.2054	13.564	387765	VV

TOTALS: 100.0000

9220600

Figure E-2. TCO Standard Chromatogram (Rep 2)

CHART SPEED 1.0 CM/MIN
ATTEN: 32 ZERO: 5% 1 MIN/TICK



TITLE: TCO IN XAD-2

21:02 27 APR 87

CHANNEL NO: 1

SAMPLE: TCO 4124187 *ml*

METHOD: TCO

PEAK NO	PEAK NAME	RESULT	TIME (MIN)	AREA COUNTS	SEP CODE
1		98.9613	1.120	3628520	VV
2		0.4143	1.562	15190	T
3		0.5056	1.663	18540	T
4		0.0618	7.650	2266	G
5		0.0134	13.411	493	VV
6		0.0205	13.444	752	VV
7		0.0119	14.044	436	VV
8		0.0112	15.009	409	VB

TOTALS:

100.0000

7444410

Figure E-3. XAD-2 Blank TCO Chromatogram

VOLUME IV

APPENDIX A
INCINERATOR AND SCRUBBER
OPERATING DATA

Volume WTL
removed pages

CALCULATION SHEET

SIGNATURE MAYHEW DATE 10/9 CHECKED _____ DATE _____
PROJECT CRAWSON JOB NO. _____
SUBJECT Process DATA SHEET 1 OF 4 SHEETS

TIME	AIR VALUE T _g °F	SUBST. CONC. AIR P	CHGR AIR VALUE °/min	INCR DRAFT P	AP °	Flow % open	Burner #2 % open	Burner #4 % open	Burner #6 % open	Spec Heat H ₂ O Btu/lb	Spec Heat H ₂ O °F	W.H. °F	Q _{NET} Btu/hr
2045	14.6	20	45	-16	22.5	100	0	0	0	132	110	145	110
2100	12.6	20	35	-2	22	100	0	0	0	130	110	145	0.95
2115	12.5	15	35	-2	20	100	0	0	0	130	110	145	1.0
2130	12.8	10	35	-22	21	90	0	0	0	130	110	145	1.0
2145	12.7	10	35	-22	21	100	0	0	0	130	110	145	1.0
2200	12.7	10	35	-24	20	100	0	0	0	130	110	145	1.0
2215	12.3	10	35	-2	20	100	0	0	0	130	110	145	1.0
2230	12.0	35	40	-16	21	100	0	0	0	128	110	145	1.0
2245	12.1	7	35	-24	19	100	0	0	0	130	105	145	1.0
2300	12.3	7	35	-2	21	85	0	0	0	130	110	145	1.0
2315	11.7	30	35	-16	20	80	0	0	0	128	110	145	0.95
2330	11	42	40	-16	22	45	0	0	0	132	110	145	0.95
2345	11.2	0	40	-16	23.5	100	0	0	0	130	110	145	0.95
2400	11.7	0	40	-19	21	100	0	0	0	127	105	145	1.3
2415	12	0	40	-21	21	100	0	0	0	130	105	145	1.3
2430	12.4	0	40	-2	24	100	0	0	0	130	115	145	1.35
2445	12.4	10	40	-18	20	100	0	0	0	130	115	145	1.45

change
burner

PLANT
O₂
NET
correct

SIGNATURE MAY HEW

DATE 10/10

CHECKED _____

DATE _____

PROJECT CRANSTON SEWAGE SLUDGE

JOB NO. _____

SUBJECT Process Data

SHEET 1

OF _____

SHEETS

TIME	#1	#2	#3	#4	#5	#6	After burner Temp	INLET TO THE FURNACE	INLET TO THE AFTERBURNER	CEASER SHUT OFF INLET	SLUDGE FEED TOTALIZER	AMT GMS	SLUDGE FEED POINT
1115	940	1500	1660	1360	900	580	1170	540	90	180	1607118	45633	
1130	940	1520	1680	1360	920	600	1150	850	100	180	1608156	45673	
1145	920	1520	1680	1350	920	600	1080	850	100	180	1609459	45705	
1200	920	1520	1660	1340	900	580	1120	540	80	180	1610411	45732	
1215	920	1530	1680	1340	930	600	1120	700	100	180	1611570	45771	
1230	910	1540	1680	1350	930	600	1100	900	100	170	1612475	45798	
1245	900	1540	1680	1340	910	580	1140	530	90	180	1613579	45829	
1300	920	1540	1680	1350	930	600	1130	930	90	180	1614675	45862	
1315	910	1530	1680	1340	910	580	1130	560	90	170	1615675	45887	
1330	910	1540	1660	1360	910	580	1120	580	90	170	1616773	45913	
1345	920	1530	1640	1360	920	600	1140	960	90	180	1617874	45944	
1400	920	1530	1640	1380	920	560	1150	560	80	180	1618949	45971	
1415	940	1540	1660	1370	910	570	1160	150	90	180	1619965	460036	
1420	970	1560	1720	1360	920	580	1240	100	100	180	1621218	46036	
1445	960	1540	1710	1310	900	570	1200	576	90	180	1622186	46062	
1500	940	1540	1660	1280	890	570	1050	860	90	180	1623246	46081	
1515	910	1520	1630	1280	900	560	1010	620	90	180	1624334	46102	
1530	900	1500	1580	1320	920	600	1070	610	70	180	1625465	46135	
1545	900	1510	1600	1330	910	580	1040	570	100	170	1626482	46165	
1645	900	1550	1646	1330	900	570	1160	540	90	170	1627041	46229	
1700	930	1560	1700	1340	920	600	1120	450	100	170	1631798	46312	
1715	930	1560	1730	1300	910	580	1160	820	100	170	1632917	46332	
1730	940	1560	1710	1280	900	560	1180	800	100	170	1634052	46348	
1745	930	1560	1700	1270	890	550	1140	920	100	170	1635129	46361	
1800	920	1560	1710	1260	900	550	1160	560	90	170	1636162	46380	
1815	940	1560	1700	1260	900	560	1160	910	90	170	1637286	46407	
1830	920	1560	1710	1260	900	550	1100	900	100	170	1638254	46421	
1845	930	1560	1710	1250	900	550	1200	560	100	170	1639300	46444	
1900	940	1560	1720	1260	910	570	1150	940	100	170	1640421	46470	

X25

1983-18-4

SIGNATURE MAYHEW

DATE 10/10/87

CALC. NO. _____

PROJECT CRANSTON SEWAGE SLUDGE

CHECKED _____ DATE _____

SUBJECT PROCESS DATA

JOB NO. _____

SHEET 2 OF _____ SHEETS

TIME	FLUE GAS O ₂	AIR VALUE to HC	SLUDGE FEED RATE (lb/hr)	CELTIDE (°F)	FLUE GAS PRESS.	HEATING VALUE (Btu/lb)	ADP (°F)	VENT. TRAP (°F)	SPRINKLER HEAT. OUTLET	SPACE HEAT. INLET	WASTE HEAT RECY. SYS.	WASTE HEAT EXCH. FLOW	RPM	NOTES
1115	14.5	100	0.3	12	-22	20	20	100	130	110	0	145	1.0	0
1130	15	100	0.3	0	-22	22	22	100	132	115	0	145	1.0	0
1145	14.8	100	0.3	0	-24	21	21	100	128	115	0	145	1.0	0
1200	15	100	0.3	0	-24	20	20	100	130	110	0	145	1.0	0
1215	15	100	0.2	0	-24	22.5	22.5	100	130	115	0	145	1.0	0
1230	15	100	0.2	0	-25	22	22	100	128	110	0	145	1.0	0
1245	15	100	0.3	0	-27	23	23	100	132	110	0	145	1.0	0
1300	15.1	100	0.3	0	-20	18.5	18.5	100	130	110	0	145	1.0	0
1315	14.8	100	0.3	0	-20	18.5	18.5	100	130	110	0	145	1.0	0
1330	14.8	100	0.3	0	-16	20	20	100	130	115	0	145	1.0	0
1345	14.6	100	0.3	0	-16	20	20	100	129	110	0	145	1.0	0
1400	14.3	100	0.3	10	-16	20	20	15	132	110	0	145	1.0	0
1415	14.7	100	0.3	20	-16	22	22	30	132	115	0	145	1.0	0
1430	15.5	100	0.3	30	-16	23	23	100	132	115	0	145	1.0	0
1445	14.3	100	0.3	20	-22	22	22	100	132	110	0	145	1.0	0
1500	14.5	100	0.3	10	-27	22	22	100	130	110	0	145	1.0	0
1515	15.4	100	0.2	10	-26	20	20	100	130	110	0	145	1.0	0
1530	15.1	100	0.2	10	-26	21	21	100	130	110	0	145	1.0	0
1545	15.1	100	0.2	8	-25	22.5	22.5	100	130	115	0	145	1.0	0
1645	15.1	100	0.2	9	-24	22	22	100	130	115	0	145	1.0	0
1700	15.6	100	0.2	10	-24	23	23	100	130	115	0	145	1.0	0
1715	15.5	100	0.2	12	-33	21	21	100	130	110	0	145	1.0	0
1730	15.9	100	0.2	12	-25	24	24	100	130	110	0	145	1.0	0
1745	16	100	0.2	9	-3	23	23	100	130	110	0	145	1.0	0
1800	16	100	0.2	9	-26	20	20	100	130	110	0	145	1.0	0
1815	16	100	0.2	9	-37	24	24	100	130	115	0	145	1.0	0
1830	15.7	100	0.1	7	-34	27	27	100	130	110	0	145	1.0	0
1845	16.2	100	0.2	5	-26	24	24	100	130	110	0	145	1.0	0
1900	15.8	100	0.2	0	-35	24	24	100	130	115	0	145	1.0	0

CALCULATION SHEET

MANUAL METHODS: 2 VOST @ Inlet +
1 METH 12 ft

SIGNATURE J. Mayhew DATE 9/30/87 CALC. NO. _____
PROJECT Sewage Sludge / Cranston CHECKED _____ DATE _____
SUBJECT PROCESS DATA SHEET JOB NO. _____
SHEET 1 OF _____ SHEETS

Time	Heath #1	Heath #2	Heath #3	Heath #4	Heath #5	Heath #6	Estimate Cranston	File Recorder	ID Inlet	Center Outlet	Sludge Inlet	Sludge Outlet	Notes 5 ft	Notes 15 ft
15:00	880	1220	1340	1120	820	520	900	740	100	160	420873	21825	456016	
15:15	880	1240	1340	1140	820	520	920	760	100	160	422013	21852	4496	
15:30	920	1280	1440	1150	840	520	1050	860	100	160	423037	21876	4504	
15:45	950	1290	1450	1140	850	520	1100	880	100	160	424263	21876	672	
16:00	950	1230	1460	1120	840	510	1100	950	100	160	424431	21715	5008	
16:15	880	1240	1380	1100	820	500	810	740	100	160	425683	21754	3776	
16:30	840	1260	1260	1100	800	500	760	650	100	160	426482	21754	4700	
16:45	820	1180	1220	1110	820	510	740	620	100	160	427657	21746	4424	
17:00	810	1160	1250	1150	890	510	750	630	100	160	428765	21715	4424	
17:15	810	1170	1240	1160	920	530	790	650	100	160	429881	22014	4472	
17:30	830	1190	1240	1200	940	540	840	700	100	160	431043	22033	4648	
17:45	840	1210	1330	1210	950	550	900	750	100	150	432168	22052	4496	
18:00	820	1220	1320	1220	970	560	800	670	100	160	433272	22072	4420	
18:15	800	1200	1230	1210	980	550	740	620	100	160	434445	22041	4684	
18:30	790	1160	1250	1210	980	550	720	600	100	160	435485	22129	4168	
18:45	780	1140	1220	1210	1000	560	720	580	100	160	436655	22149	4316	
19:00	780	1120	1210	1210	1000	560	700	550	100	160	437734	22149	4316	
19:15	780	1140	1220	1220	1010	560	720	580	100	160	438877	22172	4592	
19:30	780	1140	1220	1230	1030	570	730	610	100	160	440045	22187	4592	
19:45	770	1130	1210	1230	1040	580	760	610	100	160	441052	22204	4424	
20:00	770	1120	1200	1240	1050	590	770	620	100	160	442301	22225	4600	
20:15	770	1130	1210	1260	1080	580	780	610	100	160	443118	22243	4468	
20:30	780	1140	1240	1270	1100	600	800	630	100	160	444526	22262	4432	
20:45	800	1160	1300	1270	1090	640	810	660	100	160	445714	22282	4752	
21:00	780	1160	1280	1260	1090	600	790	640	100	160	44684	22301	4400	
21:15	780	1140	1240	1260	1080	600	750	640	100	160	447975	22321	4644	
21:30	760	1140	1230	1250	1090	600	730	620	100	160	449035	22338	4232	
21:45	750	1120	1210	1250	1100	600	720	610	100	160	450128	22358	4380	

SIGNATURE MAYHEW DATE 9/30/87 CHECKED _____ DATE _____
PROJECT CRANSTON SEW. SLUDGE JOB NO. _____
SUBJECT PROCESS DATA SHEET SHEET 2 OF _____ SHEETS

[illegible]



CALCULATION SHEET

After burner = off.
WASTE HEAT RECOV = 0%.

SIGNATURE Bill Mayhew DATE 10/1/87 CHECKED _____ DATE _____
PROJECT CRANSTON Sewage Sludge JOB NO. _____
SUBJECT PROCESS DATA

CALC. NO. _____

SHEET 1 OF _____ SHEETS

TIME	#1 °F	#2 °F	#3 °F	#4 °F	#5 °F	#6 °F	After Burner "E.C.F." °F	Inlet to Precooler °F	T.D. FAN INLET °F	CENTER SHAFT OUT- LET °F	SLUDGE FEED TOTALIZER (lb/hr)	NAT. GAS TOTALIZER (lb/hr)	SLUDGE FEED (lb/hr (avg))
10:15	800	1190	1310	1300	1140	600	1050	380	90	160	706840	23254	—
10:35	800	1310	1310	1260	1100	600	1210	470	90	160	708199	23285	4469
10:45	800	1300	1500	1250	1100	600	1160	500	90	160	708775	23255	5760
11:00	880	1300	1480	1240	1070	600	1140	520	90	170	709756	23305	3924
11:15	880	1300	1440	1240	1060	600	—	510	90	170	700966	23323	4840
11:30	910	1320	1500	1220	1050	600	1190	520	100	180	711948	23337	3928
11:45	920	1340	1500	1220	1050	590	1180	510	100	170	713140	23353	4768
12:00	910	1330	1480	1200	1030	590	1160	520	90	170	714216	23368	4304
12:15	900	1320	1450	1200	1030	580	1080	500	90	180	715446	23386	4920
12:30	890	1320	1420	1200	1010	600	1070	510	90	180	716509	23404	4252
12:45	900	1340	1460	1210	1030	590	1200	510	100	180	717603	23420	4376
13:00	920	1350	1490	1210	1040	570	1140	490	100	180	718785	23436	4728
13:15	920	1350	1500	1200	1040	590	1140	490	100	180	719862	23451	4908
14:30	870	1320	1410	1220	1040	590	1020	440	80	160	725577	23538	—
14:45	870	1330	1430	1230	1040	570	1020	440	90	170	726618	23552	4164
15:00	850	1310	1400	1210	1030	580	1020	440	90	170	727787	23569	4164
15:15	840	1300	1310	1210	1030	580	950	410	90	170	728915	23586	4512
15:30	830	1290	1350	1220	1050	590	980	430	90	170	730017	23611	4408
15:45	820	1270	1420	1210	1050	590	960	420	90	170	731260	23634	4972
16:00	800	1250	1380	1200	1030	580	920	410	90	170	732253	23647	3672
16:15	800	1250	1330	1200	1030	580	880	400	90	170	733354	23665	4524
16:30	810	1240	1330	1220	1050	590	970	430	90	170	734518	23690	4736
16:45	820	1280	1380	1220	1050	570	1000	440	90	170	735644	23708	4504
17:00	810	1260	1350	1210	1040	580	910	410	90	170	736805	23722	4644
17:15	890	1220	1290	1210	1040	580	890	400	90	160	737947	23740	4168
17:30	780	1200	1260	1230	1040	600	890	410	90	160	739015	23766	4664
17:45	760	1160	1280	1210	1060	580	860	400	90	160	740198	23781	—

4-81-3381

RADIAN
CORPORATION

CALCULATION SHEET

SIGNATURE _____
 PROJECT _____
 DATE 10/01/87
 CHECKED _____
 JOB NO. _____
 SHEET _____ OF _____
 SHEETS _____

TIME	HEADIN #1	2	3	4	5	6	7	8	9	10	TOT.	DATE OAS TOT
1800	770	1170	1250	1230	1080	590	900	420	90	160	741324	23801
1815	790	1200	1320	1240	100	610	1000	450	90	160	742403	23826
1830	800	1240	1380	1220	1180	600	1020	480	90	160	743449	23847

4-81-3381
52x

SIGNATURE Bill Mowbray

DATE 10/1/87

CHECKED

CALC. NO.

PROJECT Cranston, Sewage Sludge

JOB NO.

DATE _____

SUBJECT PROCESS DATA

SHEET 2

91

-SHEETS

101107

TIME	INCLINE FLUE GMS O ₂	SLUDGE COMB. AIR PRESS	INCLINE DRAFT PRESS.	VENT. SCRUB. ΔP	CNTR SHAFT RPM	Scrubber Totalizer gal/min	Venturi Throat open (%)	Comb Air to Burner @ 2 min	Comb Air to Burner @ 2 min	COMB COMB AIR to Burner @ 2 min	NOTES
10:15	5.4	0.5	-0.16	20	0.85	195	28	0	0	15%	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
10:55	7	0.6	-0.16	20	0.85	195	30	0	0	15%	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
10:45	7.6	2	-0.16	20	0.85	195	30	0	0	15%	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
11:00	7.3	2	-0.16	20	1.05	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
11:15	6.2	0.5	-0.16	20	1.05	195	25	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
11:30	7	0.5	-0.16	20	1.10	195	45	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
11:45	7.3	2	-0.16	20	1.05	195	73	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
12:00	7	2	-0.16	20	1.05	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
12:15	7.4	2	-0.17	20	1.05	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
12:30	7.9	2	-0.16	20	1.05	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
12:45	7.1	2	-0.16	20	1.05	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
13:00	7.2	2	-0.16	20	1.05	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
13:15	7.6	2	-0.16	20	1.05	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
14:30	8	2	-0.16	20	1.0	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
14:45	9.3	2	-0.16	20	1.0	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
15:00	10.8	2	-0.24	20	1.0	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
15:15	10.1	2	-0.21	20	1.0	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
15:30	9.6	2	-0.22	20	1.05	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
15:45	11.1	2	-0.30	20	1.0	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
16:00	12.1	2	-0.29	20	1.05	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
16:15	9.5	2	-0.19	20	1.05	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
16:30	7.6	2	-0.18	20	1.0	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
16:45	7.7	2	-0.2	20	1.0	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
17:00	11.2	2	-0.2	20	1.0	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
17:15	9.7	2	-0.2	20	1.1	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
17:30	9.6	2	-0.25	20	1.0	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE
17:45	9.9	2	-0.26	20	1.03	195	20	0	0	2	→ WAS LATE DUE TO NEWLY ADDED PARAMS FOR P DATA TAKEN LOWLINE

1-81-3281

RADIAN
CORPORATION

CALCULATION SHEET

SIGNATURE _____ DATE 10/01/72 CHECKED _____
 PROJECT _____ JOB NO. _____
 SHEETS _____ OF _____

TIME	ENGINE FUEL GAS O ₂	SCHEMATIC COMB. AIR PRESS	MAIN DRAFT PRESS.	VENT PRESS SECONDS	CNTR SHAFT RPM	SCUMPER TOTALER 8 1/4 in	VENTURI THROAT OPEN C/F	DIFFER H ₂ O H ₂ O	AIR TO COMB	CNTR SHAFT RTN AIR % open
1800				Δ 17						
1800	7.8	2.8	-2	20	1.1		22	0	4	0
1815	7.7	2.1	-2.1	20	1.1	195	20	0	6	0
1830	11	2	-2.1	20	1.1		20	0	2	0
										END

4-81-3361

SIGNATURE Bill Mayhew DATE 10/1/87 CHECKED _____ DATE _____
PROJECT CRANSTON Sewage Sludge JOB NO. _____
SUBJECT PROCESS DATA SHEET 3 OF _____ SHEETS

10/1/87

WASTE RECOV. SYS.

TIME	SPACE HEATING OUTLET H ₂ O TEMP °F	SPACE HEATING RETURN H ₂ O TEMP °F	WASTE HEAT RECOV AP	WASTE HEAT RECOV INIT FLUID FLOW
1100	250	175	0	140
1115	240	170	0	135
1130	136	115	0	137
1145	136	110	0	140
1200	135	115	0	140
1215	131	110	0	140
1230	129	107	0	140
1245	130	110	0	140
1300	130	110	0	140
1315	134	110	0	140
1430	133	110	0	140
1445	133	110	0	140
1500	134	110	0	140
1515	136	110	0	140
1530	138	110	0	140
1545	140	115	0	140
1600	144	115	0	140
1615	153	123	0	140
1630	165	132	0	140
1645	176	140	0	140
1700	181	150	0	140
1715	187	150	0	140
1730	194	160	0	140
1745	199	165	0	140

OPENED ANOTHER
BLDG. TO HEAT
X-CHANGE

Bunker #2 empty, will switch to
Bunker #3

11:09 start feed from Bunker #3

15:05 START OUTLET
SAMPLERS INTENTIONALLY
PLUGGED BY PASS
TO AVOID BACKLEAKAGE

OPERATOR OPENED DOOR TO #4 TO
↑ O₂

4-81-3381

1800	203	170	0	140
1815	202	170	0	140

SUBJECT _____ SHEET _____ OF _____ SHEETS
PROJECT _____ JOB NO. _____
SIGNATURE _____ DATE 10/01/87
CHECKED _____
CALC. NO. _____

CALCULATION SHEET

RADIAN
CORPORATION



CALCULATION SHEET

Afterburner ON.

SIGNATURE _____ DATE 10/02/87 CHECKED _____ CALC. NO. _____
PROJECT _____ JOB NO. _____
SUBJECT _____ SHEET 2 OF _____ SHEETS

TIME	INLET GAS O ₂ %	EXHAUST AIR %	BUILDUP PRESS. (in WC)	INLET PRESS. (in WC)	VENT PRESS. (in WC)	VENT (76) (in WC)	INLET RPM	OUTLET RPM	Surge H ₂ O Flow (gpm)	Burner #1 at Health (in WC)	Burner #2 at Health (in WC)	Burner #3 at Health (in WC)	Notes
1530	7.6	30	1.8	-.14	24.5	100	1.05	1.05	197	100	100	5	1530
1545	7	30	1.6	-.12	25	100	1.05	1.05	—	100	100	90	1530
1600	7.6	37	1.4	-.15	23.5	100	1.05	1.05	—	100	100	100	1530
1615	5.5	100	0.6	-.15	23	100	1.05	1.05	—	100	100	20	1530
1630	5.4	100	0.4	-.15	23.4	85	1.05	1.05	—	100	100	5	1530
1645	6.5	100	0.4	-.15	22	100	1.0	1.0	—	100	100	45	1530
1700	8.2	100	0.4	-.15	24	100	1.05	1.05	—	100	100	50	1530
1715	6.4	100	0.4	-.15	24.5	100	1.05	1.05	—	100	100	90	1530
1730	5.8	100	0.4	-.15	24	100	1.0	1.0	—	100	100	25	1530
1745	7.5	100	0.4	-.15	24	100	1.05	1.05	—	100	100	0	1530
1800	7.3	100	0.4	-.15	22	100	1.0	1.0	—	100	100	45	1530
1815	8.3	100	0.4	-.15	22.5	100	1.05	1.05	—	100	100	82	1530
1830	8.4	100	0.4	-.15	23	100	1.0	1.0	—	100	100	40	1530
1845	5.9	100	0.4	-.12	23	100	0.9	0.9	—	100	100	30	1530
1900	11.7	100	0.4	-.18	22.5	100	1.0	1.0	—	100	100	30	1530
1915	10.0	100	0.4	-.15	22	100	1.05	1.05	—	100	100	100	1530
1930	7.7	100	0.4	-.2	22.5	100	1.0	1.0	—	100	100	100	1530
1945	7.1	100	0.4	-.2	22	100	1.0	1.0	—	100	100	45	1530
END													

CALCULATION SHEET

SIGNATURE MATHEW

DATE 10/2/87

CALC. NO. _____

PROJECT CRANSTON Sewage Sludge

CHECKED _____ DATE _____

JOB NO. _____

SUBJECT _____ SHEET 1 OF _____ SHEETS

#1	#2	#3	#4	#5	#6	AFTER BURNER TEMP °F	INLET TO THE PRE- COOLER °F	ID FAN INLET °F	ENTER SMALL OUTLET °F	SUM OF TOTALIZER (116)	NATURAL GAS TOTALIZER	SLUDGE FIELD RATE lb/h (16/1000)
1532 850	1260	1450	1260	1050	570	1330	680	100	180	837615	26170	
1545 860	1280	1470	1250	1050	590	1330	680	100	180	838581	26223	
1600 860	1290	1450	1240	1010	620	1310	690	100	180	839635	26283	
1615 880	1310	1500	1230	1000	610	1350	700	100	180	840601	26340	
1630 880	1300	1470	1220	980	600	1310	700	100	180	841615	26396	
1645 860	1310	1500	1210	950	590	1320	700	100	180	842453	26448	
1700 900	1320	1480	1210	950	600	1320	710	100	180	843583	26504	
1715 890	1320	1510	1200	950	600	1360	710	100	180	844602	26565	
1730 890	1340	1510	1200	950	600	1320	700	90	180	845602	26626	
1745 890	1340	1510	1180	920	600	1320	700	90	180	846696	26679	
1800 870	1340	1510	1180	910	570	1320	700	50	180	847587	26732	
1815 870	1340	1480	1180	910	600	1350	720	100	180	848623	26781	
1830 880	1340	1500	1180	910	610	1340	710	100	180	849646	26836	
1845 880	1360	1530	1170	900	600	1400	740	100	180	850680	26890	
1900 900	1340	1410	1140	870	590	1350	740	90	170	851590	26943	
1915 870	1310	1380	1140	870	570	1300	710	90	170	852510	26995	
1930 870	1340	1430	1140	880	600	1310	710	90	170	853528	27054	
1945 870	1340	1430	1140	880	610	1320	700	100	170	854565	27113	

WET SLUDGE

CALCULATION SHEET

SIGNATURE _____ DATE 10/02/87 CHECKED _____ DATE _____
PROJECT _____ JOB NO. _____
SUBJECT _____ SHEET 20 OF _____ SHEETS

SPACE HEATING OUTLET H ₂ O TEMP °F	SPACE HEAT RETURN H ₂ O TEMP °F	WASTE HEAT RECDY. ΔP	WASTE HEAT INT. FLUID TEMP °F	NOTES:
1530	177	0	140	Approximate Volume of Aster burner = 35 ft ³
1545	177	0	140	
1600	182	0	140	
1615	184	0	140	
1630	188	0	140	
1645	188	0	140	
1700	190	0	140	
1715	191	0	140	
1730	193	0	140	
1745	192	0	140	
1800	194	0	140	← Aster burner Flame Out
1815	198	0	140	
1830	198	0	140	
1845	198	0	140	
1900	200	0	140	
1915	200	0	140	← 6:50 Aster burner Flameout
				← WET SLUDGE BEGIN FEEDING

CALCULATION SHEET

SIGNATURE MAYHEW

DATE 10/3/87

CALC. NO. _____

PROJECT CRANSTON SEWAGE SLUDGE

CHECKED

DATE _____

SUBJECT PROCESS DATA

SHEET _____ OF _____ SHEETS

TIME	#1	#2	#3	#4	#5	#6	ADJUST TO TEMP OF	INLET TO TIME BASE - COOLER	ID FRAUD INLET	CNTG SHAFT CHART	SHADE FIELD TOTALIZER (lb)	NATURAL GAS TOTALIZER	SHADE FIELD SP-4500
1030	950	1480	1650	119	900	560	1350	670	100	170	922102	28667	
1045	1000	1500	1650	1180	890	560	1340	1020	100	170	923151	28702	
1100	1020	1500	1640	1170	870	550	1370	920	100	170	924851	28785	
1115	1000	1500	1660	1160	800	540	1360	950	100	170	926050	28776	
1130	1070	1500	1650	1160	850	540	1440	1100	110	170	927110	28812	
1145	1000	1490	1640	1140	840	530	1400	720	100	170	928173	28850	
1200	1020	1500	1660	1140	840	540	1420	—	100	170	929320	28885	
1215	1060	1500	1660	1120	820	540	1440	1030	110	170	930540	28934	
1230	1020	1500	1660	1130	810	540	1400	760	100	180	931633	28958	
1245	1060	1500	1660	1130	810	540	1460	1060	110	170	932744	28996	
1300	1040	1490	1630	1110	800	530	1430	1080	110	180	933710	29038	
1315	1040	1500	1660	1100	790	530	1460	800	110	180	934952	29094	
1330	1040	1500	1660	1100	780	530	1480	1080	110	170	936095	29115	
1345	1050	1490	1650	1100	770	530	1430	1050	110	170	937119	29152	
1400	1020	1490	1650	1100	770	530	1460	780	100	170	938373	29194	
1415	1020	1470	1650	1100	770	520	1380	1180	100	160	939468	29232	
1430	1020	1480	1640	1100	760	520	1380	900	100	160	940519	29270	
1445	1000	1470	1620	1100	760	510	1300	720	100	160	941741	29309	
1500	980	1460	1600	1120	770	520	1300	1000	100	160	942889	29352	
1515	980	1460	1580	1140	800	530	1330	720	100	160	944077	29395	
1530	980	1470	1600	1156	820	540	1330	700	100	160	945059	29433	



CALCULATION SHEET

SIGNATURE MAYHEW DATE 10/3/87 CHECKED _____ DATE _____
PROJECT CRANSTON SEWAGE SLUDGE JOB NO. _____
SUBJECT _____ SHEET _____ OF _____ SHEETS

TIME	INLET FLUE GAS	OUTLET SURF AIR	SURF AIR FLOW PRESS.	INLET DRIFT PRESS.	VENT SCHEM DP	VENT THROAT OPEN	CANAL SHEAT RPM	SCHEM FLOW T/min	EXTEND #2	BURNER #4	#6	RETURN AIR % OPEN
10:30	7.2	100	0.4	-19	23	100	1.05	197	0	27	20	25+40
10:45	6.3	100	0.4	-15	24	100	1.05		0	27	20	40+60+55
11:00	6.8	"	"	-15	22.5	100	1.05		0	27	20	40+30+40
11:15	6.2	100	0.4	-11	24	100	1.05		0	27	20	50
11:30	7.1	100	0.4	-12	23	100	1.05		0	27	20	60+50+40
11:45	7.7	100	0.4	-15	23	100	1.05		0	27	20	50+25+35+40
12:00	5.6	100	0.4	-11	24.5	100	1.05		0	27	20	40
12:15	5	100	0.4	-15	23	100	1.05		0	27	20	60+50
12:30	6.8	100	0.4	-15	23	100	1.05		0	27	20	50
12:45	5.3	100	0.4	-13	23.5	100	1.05		0	27	20	60
13:00	7.4	100	0.4	-15	23.5	100	1.05		0	27	20	53
13:15	6.3	100	0.4	-15	24	100	1.05		0	27	20	59+50
13:30	6.0	100	0.4	-12	24.3	100	1.05		0	27	20	60
13:45	6.4	100	0.4	-14	24	100	1.05		0	27	20	60+55+47
14:00	7.6	100	0.4	-14	23	100	1.05		0	27	20	47+55
14:15	7	100	0.4	-13	23.5	100	1.0		0	27	20	55
14:30	7	100	0.4	-14	23.5	100	1.0		0	27	20	55+45+40
14:45	8.3	100	0.4	-14	21	100	1.0		0	27	20	35+25
15:00	6.6	100	0.4	-14	23	100	1.0		0	27	20	35
15:15	6.3	100	0.4	-14	19	100	1.0		0	27	20	45
15:30	6.8	100	0.4	-14	23.5	100	1.0		0	27	20	45

1983-164

CALCULATION SHEET

SIGNATURE MAYHEW DATE 10/5/87 CHECKED _____ CALC. NO. _____

PROJECT _____ JOB NO. _____

SUBJECT _____ SHEET _____ OF _____ SHEETS

TIME	SPACE HEATING OUTLET H ₂ O TEMP	SPACE HEATING RETURN H ₂ O TEMP	WASTE HEAT RECY. ΔP	WASTE HEAT FLUID FLOW
1030	160	135	0	140
1045	160	130	0	140
1100	160	130	0	140
1130	160	130	0	140
1145	160	130	0	140
1200	160	135	0	140
1215	160	130	0	140
1230	160	130	0	140
1245	160	135	0	140
1300	160	130	0	140
1330	160	130	0	140
1345	159	130	0	140
1400	160	135	0	140
1415	160	135	0	140
1430	160	135	0	140
1445	160	135	0	140
1500	160	135	0	140
1515	160	135	0	140
1530	160	135	0	140

← Furnace Out
← FO
← FO
← Mike L. made an
adjustment on the
burner air for the
ECG
← FO

← increased # of burners
to 30%
← 12:54

SIGNATURE MAYHEW DATE 10/14/87 CHECKED _____ DATE _____
 PROJECT TRANSITION SEWAGE SLUDGE JOB NO. _____
 SUBJECT PROCESS DATA SHEET _____ OF _____ SHEETS

TIME	#1	2	3	4	5	6	7	8	9	10	11	12
1445	950	1410	1490	1240	920	550	1090	500	130	160	1042349	315203
1500	980	1400	1500	1250	940	600	1130	350	130	150	1043234	31535
1515	1040	1460	1620	1210	940	610	1120	760	140	150	1044603	31567
1530	1010	1460	1610	1220	940	600	1220	740	120	150	1045615	31579
1545	1000	1460	1590	1200	920	580	1200	620	110	150	1046739	31594
1600	960	1440	1530	1200	910	560	1140	720	100	150	1048000	31607
1615	950	1410	1490	1200	910	560	1040	490	100	140	1048784	31621
1630	920	1380	1440	1220	930	550	950	640	100	150	1050085	31637
1645	900	1370	1430	1240	950	550	1000	660	100	140	1051146	31651
1700	920	1360	1430	1250	960	550	1000	460	100	140	1052379	31664
1715	910	1350	1420	1250	980	540	950	540	110	140	1053506	31678
1730	900	1340	1410	1260	980	520	1000	450	90	140	1054654	31692
1745	890	1330	1400	1260	990	530	960	440	100	140	1055766	31706
1800	900	1340	1420	1260	1000	530	1000	570	110	140	1056851	31719
1815	900	1350	1460	1260	1000	530	1080	480	100	140	1058002	31733
1830	900	1350	1450	1250	1000	520	1000	600	100	140	1059179	31748
1845	880	1340	1440	1250	1000	520	860	440	90	140	1060248	31762
1900	850	1320	1380	1260	1000	510	910	410	90	140	1061333	31775
1915	840	1300	1350	1260	1000	510	900	390	90	140	1062598	31790
1930	840	1290	1350	1260	1050	510	900	400	90	140	1063616	31803

CALCULATION SHEET

SIGNATURE MAYHEW

DATE 10/7

CHECKED

CALC. NO.**PROJECT****JOB NO.**

DATE _____

SUBJECT.

SHEET

OF

SHEETS

[illegible]



CALCULATION SHEET

SIGNATURE _____ DATE 10/4 CHECKED _____ DATE _____
PROJECT _____ JOB NO. _____
SUBJECT _____ SHEET _____ OF _____ SHEETS

TIME	SOIL HEAT OUTLET H ₂ O TEMP	SOIL HEAT RETURN H ₂ O TEMP	WATER HEAT RETURN TEMP	WATER HEAT FLOW
1445	169	135	0	140
1500	156	130	0	140
1515	160	135	0	140
1530	160	135	0	140
1545	160	130	0	140
1600	160	130	0	140
1615	160	135	0	140
1630	160	135	0	140
1645	160	135	0	140
1700	160	134	0	140
1715	160	134	0	140
1730	160	133	0	140
1745	160	130	0	140
1800	160	130	0	140
1815	160	130	0	140
1830	160	130	0	140
1845	160	130	0	140
1900	160	135	0	140
1915	160	133	0	140
1930	160	135	0	140

4-91-3361

CALCULATION SHEET

SIGNATURE MAYHEW DATE 10/15/87 CALC. NO. _____
 PROJECT CRANSTON SEWAGE SLUDGE CHECKED _____ DATE _____
 SUBJECT PROCESS DATA JOB NO. Afterburner Off
 SHEET 1 OF 6 SHEETS

TIME	Heath TEMP #1	2	3	4	5	6	AFTER burner Temp °F	INLET to Recycle °F	ID FAN INLET °F	OUTER SHEATH OUTLET °F	Sludge Feed rate (lb/hr)	Natural GAS TOTAL
1015	780	1100	1100	1280	1060	600	840	640	90	150	1129295	32951
1030	790	1100	1170	1260	1060	540	910	350	80	150	1130243	32985
1045	790	1100	1170	1260	1070	540	900	350	80	150	1131315	33005
1100	790	1100	1170	1260	1080	580	930	370	80	150	1132279	33026
1115	800	1100	1080	1240	1080	570	820	600	90	150	1133501	33053
1130	840	1040	1260	1280	1080	570	940	680	90	150	1134288	33078
1145	840	1200	1400	1260	1080	560	1080	380	90	150	1135365	33103
1200	900	1230	1450	1260	1030	550	980	740	90	160	1136288	33133
1215	860	1200	1380	1240	1060	560	950	440	90	160	1137291	33167
1230	800	1150	1230	1220	960	560	880	310	80	170	1138355	33193
1245	780	1100	1140	1200	960	560	830	300	80	160	1139431	33215
1300	750	1160	1180	1180	1000	550	800	300	80	160	1140417	33236
1315	760	1060	1100	1210	1130	540	900	320	90	160	1141472	33246
1330	760	1150	1140	1200	1040	550	860	420	80	150	1142430	33306
1345	760	1080	1170	1230	1040	560	920	410	80	150	1143406	33357
1400	740	1070	1130	1210	1020	550	900	390	80	150	1144434	33371
1415	750	1060	1110	1230	1010	530	810	630	70	160	1145585	33414
1430	740	1060	1130	1240	1000	550	920	360	80	160	1146387	33444
1445	720	1060	1130	1230	1000	540	830	610	90	160	1147444	33481
1500	740	1050	1120	1240	990	540	850	500	80	160	1148489	33520
1515	730	1050	1120	1240	980	540	810	660	80	160	1149501	33556
1530	730	1060	1140	1240	1000	540	800	620	80	160	1150459	33592
1545	710	1050	1110	1230	1000	530	810	360	80	160	1151725	33619
1600	700	1030	1080	1240	1010	530	800	330	80	150	1152588	33659
1615	700	1010	1050	1220	1030	530	780	500	80	150	1153790	33664
1630	700	1010	1050	1230	1070	530	700	390	80	150	1154910	33704
1645	690	1010	1050	1260	1130	530	850	320	80	150	1155866	33737
1700	720	1020	1100	1260	1110	560	770	560	90	150	1156960	33781
1715	740	1020	1100	1280	1140	560	840	400	80	150	1158005	33817

CALCULATION SHEET

SIGNATURE _____ DATE 10/5 CHECKED _____ DATE _____
PROJECT CRANSTON JOB NO. _____
SUBJECT _____ SHEET 4 OF 6 SHEETS

TIME	#1	2	3	4	5	6				Slotted Feed Totalizer	Wht gms	
1730	760	1140	1150	1290	1400	520	900	340	80	150	1159106	33853
1745	770	1060	1180	1280	1120	580	710	540	80	150	1160647	33872
1800	760	1050	1150	1270	1110	580	760	370	90	150	1161102	33891
1815	760	1060	1170	1280	1110	570	850	320	80	150	1162170	33909
1830	780	1080	1220	1280	1100	570	850	600	90	150	1163355	33929
1845	760	1100	1230	1270	1100	570	830	440	80	150	1164337	33945
1900	750	1100	1200	1270	1080	570	860	340	80	150	1165405	33964
1915	740	1100	1220	1270	1090	570	840	570	90	150	1166495	33987
1930	740	1100	1220	1230	1080	560	840	1150	80	150	1167550	34008
1945	760	1120	1240	1280	1080	560	920	520	80	150	1168653	34028
2000	770	1140	1270	1280	1070	550	860	620	85	150	1169155	34045
2015	770	1140	1280	1290	1070	550	920	480	80	150	1170201	34064
2030	880	1170	1330	1300	1060	560	940	570	90	150	1172085	34079
2045												

CALCULATION SHEET

SIGNATURE MAY HEW

DATE 10/5/87

CHECKED

CALC. NO.

PROJECT CRANSTON SSI

JOB NO. Attel burner off

SUBJECT PROCESS DATA

SHEET 2

OF 6

SHEETS

TIME	INLET PURE GAS O ₂	CART SHAFT RETURN AIR % open	Stator Comp. AIR FLW PRESS	INLET DRAFT Press.	VENT SCRUB. AP	VENT THROAT open	ENTR SHAFT RPM	SCRUB H ₂ O Flow gph/min	Return Air % open	# 2	# 4	# 6	Return AIR % OPEN
1015	4.7	100	5	-16	22	100	0.85	197	100	17	0	0	47
1030	7.4	0	2.0	-18	20	57	0.85		0	0	0	0	47
1045	7.1	35	2.1	-16	21	45	0.87		0	0	0	0	47
1100	7	48	0.5	-16	20	80	0.85		0	0	20	0	47
1115	4.1	100	0.5	-16	21	100	1.05		0	0	25	0	47
1130	4.7	100	0.5	-16	21	100	1.0		0	0	0	0	47
1145	7	85	0.6	-16	20	45	1.0		0	0	0	0	47
1200	7	80	0.6	-16	24	100	1.0		0	0	0	0	47
1215	10.2	0	2.6	-18	20	100	1.0		0	0	0	0	47
1230	10	0	3	-18	19	95	1.05		0	0	0	0	47
1245	10.5	0	2.6	-18	19	55	1.0		0	0	0	0	53
1300	8.7	0	2	-15	20	55	0.85		0	55	0	0	53
1315	7.5	30	0.6	-15	20	50	0.85		100	0	0	0	50
1330	7.3	0	2	-14	22.5	60	0.85		100	0	0	0	50
1345	7.5	0	2	-15	17	55	0.9		100	0	0	0	50
1400	9.8	0	2.2	-15	23.5	40	0.75		100	75	0	0	50
1415	9.5	0	2	-15	21	100	0.85		100	0	0	0	50
1430	7.5	0	2	-15	20	100	0.95		100	25	0	0	40
1445	8.5	0	2	-15	24	100	0.85		100	40	0	0	40
1500	8.6	0	2	-15	20	100	0.85		100	40	0	0	40
1515	8.5	0	1	-15	19	20	0.85		100	0	0	0	20
1530	7.5	100	0.9	-17	21	75	0.9		100	0	15	0	20
1545	8.2	0	0.9	-17	17.5	55	1.0		0	70	0	0	20
1600	8.9	0	0.8	-17	19	55	1.0		0	70	0	0	20
1615	11.1	0	0.9	-17	21.5	40	1.0		30	70	0	0	20
1630	10.3	0	0.9	-17	18.5	65	1.0		100	70	0	0	20
1645	6.1	100	0.5	-16	20	65	1.0		100	45	20	20	20
1700	6.5	100	0.4	-17	22	100	1.03		100	0	20	20	20
1715	6	100	0.4	-17	20	100	1.0		100	0	20	20	20

CALCULATION SHEET

SIGNATURE _____ DATE 10/05/87 CHECKED _____ DATE _____
 PROJECT CRA JOB NO. _____
 SUBJECT _____ SHEET 5 OF 6 SHEETS

TIME	VALVE @ 116 GATE RETURN	SCAF P	DEFT	VENT OP	VENT TYPE	CATIZ SHEET RPM	RUBB H ₂ O FIELD	ROUND #2	#4	#6	REL. IN AIR NO OPEN
1730	4.9	100	-17	20	55	0.8	197	0	0	20	45
1745	7	100	-17	20	20	0.8		0	0	20	20
1800	7.9	0	-17	20	30	0.85		0	0	20	33
1815	5.7	100	-17	21	25	0.87		0	20	0	30
1830	8	0	-17	22	100	0.87		0	0	18	20
1845	9.9	0	-17	20	190	0.9		0	0	0	20
1900	9.5	0	-17	20	25	0.87		0	20	20	20
1915	8.6	0	-17	22.5	170	0.9		0	20	20	20
1930	8.9	0	-16	16	65	0.87		0	20	0	20
1945	7.2	0	-16	20	18	0.9		0	20	0	20
2000	7.7	0	-16	20	20	0.90		0	20	0	20
2015	8.1	0	-16	20	15	0.85		0	20	0	20
2030	7.6	0	-16	20	25	0.85		0	20	20	20

CALCULATION SHEET

SIGNATURE MAYHEW

DATE 10/5/87

CALC. NO. _____

PROJECT CRANSTON SEWAGE Sludge

CHECKED _____

DATE _____

SUBJECT PROCESS DATA

JOB NO. _____

SHEET 3

OF 6

SHEETS

TIME	SPACE HEAT OUTLET OF	SPACE HEAT RETURN H ₂ O TEMP °C	WASTE HEAT RECOVERY UNIT ΔP	WASTE HEAT INTERCHANG FLOWS
1015	139	120	Φ	140
1030	143	115	Φ	140
1045	143	120	Φ	140
1100	134	115	Φ	140
1115	134	"	"	"
1130	130	110	Φ	140
1145	133	110	Φ	140
1200	133	110	Φ	140
1215	130	110	Φ	140
1230	130	110	Φ	140
1245	130	110	Φ	140
1300	"	"	"	"
1315	130	110	Φ	"
1330	"	"	"	"
1345	"	"	Φ	"
1400	"	"	"	"
1415	"	"	"	"
1430	"	"	"	"
1445	"	"	Φ	"
1500	"	"	Φ	"
1515	"	"	"	"
1530	"	"	"	"
1545	"	"	"	"
1600	"	"	"	"
1615	"	"	"	"
1630	"	"	"	"
1645	"	"	"	"
1700	"	"	"	"
1715	"	"	"	"

NOTE: THAT TODAY IS WARMER OUTSIDE AMBIENT &
THE WASTE HEAT RECOVERY SYSTEM IS NOT
REQUIRED TO WORK AS MUCH!
Also Sludge is slightly moist although not
soupy.

← Deice Sludge introduced

← INCREASE SLUDGE FEED 4000 → 4200 lb/hr.

← Wetter Sludge

← DECREASE FEED TO 4000 (THRU T. drying)

← feed to 4300 lb/hr

RADIAN
CORPORATION

CALCULATION SHEET

SIGNATURE MAYHEW DATE 10/5 CHECKED _____ DATE _____
PROJECT CRANE JOB NO. _____
SUBJECT _____ SHEET 6 OF 6 SHEETS

1730	132	110	140
1745	130	110	140
1800	130	110	140
1815	130	110	140
1830	130	110	140
1845	130	110	140
1900	130	110	140
1915	130	110	140
1930	130	110	140
1945	130	110	140
2000	130	110	140
2015	130	105	140
2030	130	110	140

4-81-3361

Time	Heath #1 Temp.	#2	#3	#4	#5	#6	(7) After-Inlet Temp. of F	(8) Inlet Temp. of F	(9) ID From Inlet of	(10) CNR SHAFT OUT of	SLUDGE FEED TOTALIZER	NAT. GAS TOTALIZER	SP = 4500 for SLUDGE FEED
1030	910	1390	1450	1200	930	460	940	740	100	150	1232621	35052	
1045	900	1370	1440	1200	940	440	930	780	90	160	1234039	35070	
1100	900	1370	1430	1200	950	460	950	430	80	160	1234745	35079	
1115	900	1360	1430	1200	960	460	900	630	90	160	1236028	35074	
1130	890	1350	1410	1210	960	460	930	600	90	160	1237117	35107	
1145	900	1360	1410	1220	970	460	1000	440	90	160	1238043	35121	
1200	900	1360	1450	1220	980	460	950	760	100	160	12397169	35153	
1215	900	1360	1440	1220	980	460	960	500	90	160	1240380	35148	
1230	900	1360	1440	1230	980	460	930	580	90	160	1241447	35162	
1245	970	1350	1420	1210	980	460	830	670	90	160	1242584	35125	
1300	860	1320	1370	1220	990	460	890	400	80	160	1243777	35190	
1315	860	1310	1370	1240	1000	450	820	620	90	160	1244722	35204	
1330	860	1310	1480	1240	1000	460	890	580	90	160	1246003	35218	
1345	860	1300	1370	1240	1010	470	920	400	90	160	1247112	35231	
1400	850	1310	1460	1260	1000	460	900	720	90	160	1248190	35244	
1415	860	1330	1440	1250	1100	460	1000	450	90	160	1249363	35257	
1430	860	1340	1450	1240	1010	460	960	620	100	160	1250495	35274	
1445	880	1350	1460	1240	1000	460	950	750	95	160	1251643	35287	
1500	880	1260	1460	1240	1000	460	1010	750	90	160	1252755	35302	
1515	880	1340	1440	1260	1020	460	930	750	100	160	1253861	35315	
1530	860	1370	1480	1250	1030	470	1020	540	100	160	1255416	35335	
1545	880	1380	1500	1250	1030	470	1060	460	90	160	1256433	35343	
1600	900	1400	1540	1250	1030	460	1051	860	100	160	1257399	35355	
1615	910	1420	1580	1240	1020	460	1140	700	100	160	1258530	35373	
1630	910	1450	1600	1230	1000	460	1140	770	100	170	1259398	35384	
1645	910	1470	1610	1220	990	450	1060	820	100	170	1260605	35397	
1700	910	1490	1610	1210	960	450	1160	500	90	160	1261837	35410	
1715	900	1480	1600	1200	960	450	1040	840	90	160	1262895	35415	
1730	880	1470	1560	1210	940	440	1010	700	90	160	1264034	35428	
1745	880	1440	1570	1210	960	440	1010	700	90	160	1265170	35443	
1760	880	1430	1550	1200	960	440	1010	700	90	160	1266306	35453	
1775	880	1430	1540	1200	960	440	1010	700	90	160	1267442	35463	
1790	880	1430	1540	1200	960	440	1010	700	90	160	1268578	35478	
1805	880	1430	1540	1200	960	440	1010	700	90	160	1269714	35488	
1820	880	1430	1540	1200	960	440	1010	700	90	160	1270850	35498	
1835	880	1430	1540	1200	960	440	1010	700	90	160	1271986	35508	
1850	880	1430	1540	1200	960	440	1010	700	90	160	1273122	35518	
1865	880	1430	1540	1200	960	440	1010	700	90	160	1274258	35528	
1880	880	1430	1540	1200	960	440	1010	700	90	160	1275394	35538	
1895	880	1430	1540	1200	960	440	1010	700	90	160	1276530	35548	
1910	880	1430	1540	1200	960	440	1010	700	90	160	1277666	35558	
1925	880	1430	1540	1200	960	440	1010	700	90	160	1278802	35568	
1940	880	1430	1540	1200	960	440	1010	700	90	160	1279938	35578	
1955	880	1430	1540	1200	960	440	1010	700	90	160	1281074	35588	
2000	880	1430	1540	1200	960	440	1010	700	90	160	1282210	35598	

10/6

TIME	1	2	3	4	5	6	(7)	(8)	(9)	(10)	SURGE FEED TOTAL	NAT GAS TOTAL PER
2015	860	1410	1500	1300	1080	610	1100	550	90	170	127	35651
2030	860	1430	1520	1300	1080	600	1010	510	90	170	127	35663
2045	820	1400	1450	1300	1070	580	840	680	90	170	127	35676
2100	860	1400	1500	1310	1090	600	1080	460	90	170	127	35691
2115	860	1410	1450	1300	1080	600	1000	800	90	170	128	35714
2130	860	1410	1470	1310	1050	600	950	600	90	170	128	35732
2145	870	1380	1460	1300	1050	600	1060	440	80	170	128	35749

TIME	ININ. FLUE GAS $\%O_2$	AIR VALVE TO H ₂ O ENTRY CHART RETURN AIR $\%O_2$	SLUDGE COMB. AIR FLOW PRESS.	RETURN AIR $\%O_2$ TOP OF SHAFT	INCLIN DRAFT PRESS	VENTURI SCRUB. ΔP in WC	VENT. THROAT $\%OPEN$	CNTR. SHAFT RPM	SCREEN H ₂ O FLOW gal/min	BURNER #2 $\%OPEN$	#4	#6
1030	10.5	0	0.6	20	-1.6	20	60	1.35		0	0	0
1050	10.9	0	0.8	20	-1.6	18	65	1.30		0	0	0
1100	10.6	0	0.7	20	-2.0	18	65	1.35		0	0	0
1115	10.7	0	0.6	20	-1.6	20	80	1.35		0	0	0
1130	10.3	0	0.6	20	-1.6	19	85	1.30		0	0	0
1145	10.5	0	0.6	20	-1.6	20	50	1.30		0	0	0
1200	10.7	0	0.6	20	-1.6	22	100	1.35		0	0	0
1215	10.7	0	0.6	20	-1.8	18	90	1.35		0	0	0
1230	11.1	0	0.6	20	-1.6	21	85	1.25		0	0	0
1245	10.6	0	0.8	20	-2	18	95	1.33		0	0	0
1300	9.5	0	0.8	20	-2	18.5	23	1.30		0	0	0
1315	8.9	0	0.8	20	-2	20	20	1.3		0	0	0
1330	9	0	0.8	20	-1.6	20	23	1.3		0	0	0
1345	9	0	0.8	20	-2.0	20	22	1.35		0	0	0
1400	10.2	0	0.8	20	-2.0	22	40	1.35		0	0	0
1415	10.5	0	0.8	20	-2.0	18.5	20	1.35		0	0	0
1430	11.1	0	0.8	20	-2.0	22.5	45	1.25		0	0	0
1445	10.8	0	0.8	20	-2.0	21	95	1.30		0	0	0
1500	10.4	0	0.8	20	-2.0	17.5	50	1.55		0	0	0
1515	10.2	0	0.6	18	-2.0	21	100	1.60		0	0	0
1530	10	0	0.6	18	-2.0	20	100	1.60		0	0	0
1545	10	0	0.6	18	-2.2	17	80	1.60		0	0	0
1600	10.8	0	0.6	18	-2.4	22	100	1.6		0	0	0
1615	9.8	0	0.6	18	-2.4	18.5	100	1.6		0	0	0
1630	10.5	0	0.6	20	-2.4	20	100	1.55		0	0	0
1645	10.5	0	0.6	18	-2	21	100	1.6		0	0	0
1700	10.8	0	0.4	20	-2	21	95	1.6		0	0	0
1715	10.9	0	0.4	20	-2	20	100	1.6		0	0	0
1730	10.8	0	0.4	20	-2.4	20	80	1.6		0	0	0
1745	10.8	0	0.6	20	-2.3	20	65	1.6		0	0	0
1806	9.8	0	0.4	20	-2.4	20	20	1.05		0	0	0
1815	10.2	0	0.5	30	-2	20	20	1.05		0	0	0
1830	10.2	0	0.6	30	-2	20	20	1.0		0	0	0
1845	10.2	0	0.6	30	-2	20	20	1.0		0	0	0
1900	9.8	0	0.6	30	-1.7	20	60	1.0		0	0	0
1915	9	0	0.6	30	-1.8	20	95	1.05		0	0	0
1930	9	0	0.6	30	-1.9	20	100	1.75		0	0	0
1945	10.2	0	0.6	30	-1.9	22	100	1.75		0	0	0

SLIT OFF
← PILOT ON

2

9/01

	O ₂	AIR to SC. H ₂ O CONC. RTN.	RTN AIR PRESS	INCOM DRAFT	Vent DP	Vent %open	CNTR SHAFT RPM	SCREEN H ₂ O FLOW	Burner #2	#4	#6
2015	8.9	25	0.6	30	-22	20	85	1.75	0	0	0
2030	10	20	0.5	20	-26	20	90	1.75	0	0	0
2045	11.5	30	0.5	30	-18	20	100	1.75	0	0	0
2100	8.7	30	0.5	30	-18	20	20	1.70	0	0	30
2115	9.5	32	0.5	32	-18	21	20	1.70	0	0	0
2130	9.2	27	0.5	32	-18	19.5	15	1.75	0	0	0
2145	9.2	25	0.5	32	-16	19	20	1.35	0	0	0

9/01

SP. HT. OXYGEN T. °F	SP. HT. RETURN H ₂ O T. °F	WASTE HEAT RECYC ΔP	WASTE HEAT INT. FLOW
1030	130 110	Q	140
1050	130 105	Q	140
1100	" "	"	"
1115	" "	"	"
1130	128 105	Q	140
1145	132 105	Q	140
1200	130 110	"	"
1215	130 105	"	140
1230	130 110	"	"
1245	130 105	"	"
1300	131 105	"	"
1315	130 105	"	"
1330	130 105	"	"
1345	130 105	"	"
1400	130 105	"	"
1415	130 105	"	"
1430	130 105	"	"
1445	129 105	Q	140
1500	132 105	Q	140
1515	130 105	Q	140
1530	128 105	Q	140
1545	132 105	Q	140
1600	130 105	Q	140
1615	130 105	Q	140
1630	130 105	Q	140
1645	130 105	Q	140
1700	" "	"	"

Shut door on Hearth # 6; operators often open this door a little to supply adequate air for combustion, this is NORMAL OPERATING PROCEDURE at this plant and O₂ levels this high are not considered unusual. (they also reach lows of 2 or 3 at times) → again, these conditions are not considered abnormal.

O₂ still high.

CALCULATION SHEET

SIGNATURE MAYHEW DATE 10/8/87 CHECKED _____ DATE _____
PROJECT CRAWSTON SEWAGE SLUDGE JOB NO. _____
SUBJECT PROCESS DATA - "HOT FURNACE" CONDITION SHEET 1 OF 6 SHEETS

Time	°F of 1	°F of 2	°F of 3	°F of 4	°F of 5	°F of 6	Air-burner TEMP °F	INLET To the Preheater	ID FAN INLET	CURR. SHFT output	Sludge & Total area (lb)	NATURAL GAS TOTALIZER (cu ft x 2.5)	SLUDGE FEED Set Point
1030	900	1450	1610	1240	870	620	1240	600	100	180	1430569	40067	
1145	900	1450	1610	1260	850	600	1260	750	100	180	1431546	40103	
1200	900	1460	1650	1270	860	600	1260	750	100	180	1432645	40145	
1215	910	1480	1670	1270	860	610	1280	930	100	180	1433737	40195	
1230	920	1480	1670	1260	860	600	1340	990	100	180	1434273	40237	
1245	980	1450	1560	1240	860	600	1230	630	80	170	1435025	40281	
1300	900	1440	1580	1230	870	610	1210	790	100	190	1436018	40327	
1315	900	1450	1570	1240	880	620	1260	940	100	170	1437165	40378	
1330	920	1470	1670	1270	850	610	1330	680	100	190	1438313	40422	
1345	920	1470	1640	1260	850	600	1300	920	100	190	1439269	40458	
1400	940	1470	1640	1240	840	590	1320	980	100	190	1440335	40499	
1415	980	1480	1660	1240	840	610	1380	940	100	170	1441436	40548	
1430	960	1470	1640	1220	820	600	1230	780	100	190	1442505	40590	
1445	960	1480	1660	1220	830	600	1300	980	100	190	1443685	40638	
1500	950	1480	1660	1220	840	600	1280	630	100	190	1444686	40682	
1515	960	1490	1660	1220	830	600	1330	980	100	190	1445810	40732	
1530	960	1480	1640	1220	820	600	1340	1010	100	170	1446865	40778	
1545	950	1480	1640	1210	840	600	1300	690	100	190	1447953	40827	
1600	950	1490	1660	1220	840	610	1320	920	100	190	1448949	40872	
1615	940	1500	1660	1220	820	600	1280	920	100	190	1450067	40914	
1630	930	1500	1660	1230	840	600	1260	680	100	190	1451145	40963	
1645	920	1490	1650	1230	850	610	1260	930	100	190	1452290	41011	
1700	920	1490	1650	1230	830	580	1210	570	100	190	1453470	41063	
1715	900	1490	1650	1240	840	600	1220	700	100	190	1454418	41105	
1730	900	1490	1660	1240	860	610	1250	860	100	190	1455347	41150	
1745	900	1490	1660	1240	840	590	1260	830	100	190	1456388	41189	
1800	900	1490	1650	1240	860	610	1240	940	100	190	1457570	41247	

CALCULATION SHEET

SIGNATURE MAYHEW DATE 10/8 CALC. NO. _____

PROJECT CRANSTON RI S&W SLURRY DATE 7-18 CHECKED DATE

SUBJECT PROCESS DATA JOB NO. _____
SHEET 2 OF 10 SHEET _____

Time	O ₂	AIR TO H ₂ O 92 open "empty" ratio	SUCKER COVER AIR PRESS	INLET AIR COUNT (GAL)	INLET DRAFT TRESS	Weight ΔP	Weight Inlet % open	CONTR SHAFT RPM	Bunker #2	#4	#6	SCRUB H ₂ O Flow
1130	13.6	100%	0.4	15%	-24	20	20%	1.15	75	100	10	197
1145	13.1	160	0.3	10%	-26	20	22%	1.20	60	100	5	
1200	13.3	100	0.3	15%	-26	20.5	22%	1.2	60	100	65	
1215	13.8	100	0.3	8%	-23	20	20%	1.15	60	70	35	
1230	14.3	100	0.3	10%	-27	20	20	1.25	60	70	10	
1245	14.5	0	0.3	0	-21	20	18	1.20	100	100	100	
1300	14.9	0	0.4	20	-23	20	22	1.17	100	100	100	
1315	14.1	0	0.4	20	-25	21	22	1.17	100	100	100	
1330	13.8	100	0.4	22	-22	20	20	1.2	100	100	0	
1345	14.4	100	0.3	30	-16	20	20	1.2	100	100	0	
1400	14.6	100	0.4	25	-16	20	22	1.2	100	100	60	
1415	14.8	100	0.4	30	-16	20	20	1.15	100	100	40	
1430	14.7	100	0.4	25	-20	20	40	1.15	100	100	10	
1445	14.4	100	0.4	25	-2	20	60	1.15	100	100	60	
1500	14.6	100	0.4	25	-2	20	22	1.15	100	100	45	
1515	14.4	100	0.4	25	-19	20	22	1.15	100	100	5	
1530	14.6	100	0.4	25	-19	20	22	1.2	100	100	65	
1545	14.6	100	0.3	12	-27	20	45	1.2	100	100	15	
1600	15	100	0.2	12	-26	20	80	1.25	100	100	35	
1615	14.6	40	0.2	8	-27	23	80	1.25	100	100	78	
1630	14.6	40	0.3	10	-27	24	100	1.25	100	100	075	
1645	14.6	40	0.4	10	-27	23	100	1.15	100	100	075	
1700	14.6	15	0.4	10	-27	23	100	1.15	100	100	075	
1715	14.6	12.6	0.4	5	-29	20	100	1.15	100	100	90	
1730	14.6	57	0.4	0	-31	20	100	1.2	100	100	55	
1745	15	30	0.4	0	-30	20	100	1.25	100	100	55	
1800	15	0	0.3	0	-32	20	100	1.2	100	100	68	

CALCULATION SHEET

SIGNATURE MAYHEW DATE 10/8/87 CHECKED _____ CALC. NO. _____
 PROJECT CRANSTON SEW. SLUDGE JOB NO. _____
 SUBJECT PROCESS DATA SHEET 3 OF _____ SHEETS

TIME	SPACE HEAT DUTY TEMP.	SPACE HEAT RTN TEMP	WASTE HEAT RECYC UNIT BP	WASTE HEAT MULTI FLOW
1130	130	110	Ø	140
1145	130	110	Ø	140
1200	130	110	Ø	140
1215	131	110	Ø	140
1230	130	110	Ø	140
1245	130	110	Ø	140
1300	130	110	Ø	140
1315	130	110	Ø	140
1330	132	110	Ø	140
1345	132	115	Ø	145
1400	120	115	Ø	145
1415	130	115	Ø	145
1430	130	115	Ø	145
1445	129	115	Ø	145
1500	130	115	Ø	145
1515	130	115	Ø	145
1530	130	115	Ø	145
1545	130	115	Ø	145
1600	130	115	Ø	145
1615	130	115	Ø	145
1630	130	115	Ø	145
1645	130	115	Ø	145
1700	130	115	Ø	145
1715	130	115	Ø	145
1730	130	115	Ø	145
1745	130	115	Ø	145
1800	128	115	Ø	145

← SWITCHED SLUDGE BUCKETS

NOTE THAT THERE WAS A SLIGHT
TEMP DROP DUE TO WET SLUDGE DURING
THE FIRST WAST RUN

CALCULATION SHEET

SIGNATURE _____ DATE 10/8 CHECKED _____ OF _____ SHEETS

PROJECT CRAYSTON JOB NO. _____ SHEET 4

SUBJECT PROCESS DATA

_____ OF _____ SHEETS

lost substrate
FEED →
NEAR
BURIED
→ OK
But new
BUNKER of
SUBSTRATE was
a little wet
& caused
in old 1st
depression in

Time	Heart of 1	Heart of 2	Heart of 3	Heart of 4	Heart of 5	Heart of 6	APR- Bunk Temp	Take to the cylinder	ID Feet of	CNTG SMFT OUTLET OF	CHANGE FEED TOTALIZER (lb)	WWT GWS
1815	900	1490	1650	1260	866	600	1270	720	90	190	1458659	41292
1830	930	1500	1650	1260	840	600	1300	970	90	190	1459701	41335
1845	940	1470	1650	1250	850	600	1300	630	90	190	1460701	41301
1900												
1915	950	1490	1580	1250	830	690	1300	820	80	150	1462278	41471
1930	940	1480	1570	1240	840	600	1290	890	70	190	1463411	41520
1945	930	1480	1630	1250	850	600	1290	960	90	190	1464480	41565
2000	920	1500	1650	1260	840	600	1290	860	90	180	1465490	41606

10ST SUDGE
 FEED →
 NEAR
 BURNOUT
 → OK
 BUT NEW
 BUNKER OF
 SUDGE WAS
 A LITTLE
 DEEPER &
 COUNSED
 IN SLIGHT
 DEPRESSION IN

CALCULATION SHEET

SIGNATURE _____ DATE _____ CHECKED _____ DATE _____
 PROJECT _____ JOB NO. _____
 SUBJECT _____ SHEET _____ OF _____ SHEETS

TIME	O ₂	AIR TO SCAP HG % open	RETURN AIR CAIR SHAFT %	INDIN DRAFT PRESS	VENTUR ΔP	VENTUR THROAT % open	ENTER SHAFT RPM	BURNER #2	#4	#6	SCRUB H ₂ O Flow
1815	13.8	100	0.4	-0.2	18.5	20	1.2	100	100	3	197
1830	13.0	100	0.4	-0.2	20	20	1.2	100	100	8	
1845	13.3	100	0.4	-0.2	20	20	1.2	100	100		
1900	12.6	100	0.2	-0.22	18	15	1.2	100	100	10	
1915	13.6	100	0.2	-0.22	18	15	1.2	100	100	60	
1930	14.5	100	0.2	-0.2	20	20	1.2	100	100	0	
1945	12.5	100	0.2	-0.2	20	17	1.2	100	100	0	
2000	12.5	100	0.2	-0.19	20	19	1.2	100	100	0	

NEAR BURNER
TRUST SF.
← wet sludge
missed

CALCULATION SHEET

 SIGNATURE _____ DATE _____ CALC. NO. _____
 PROJECT _____ CHECKED _____ DATE _____
 SUBJECT _____ JOB NO. _____
 SHEET _____ OF _____ SHEETS

TIME	STAGE HEAT LOSS TEMP	STAGE HEAT LOSS TEMP	WASTE HEAT REGRD UNIT AP	WASTE HEAT REGRD UNIT FLOW
1815	130	115	0	145
1830	130	115	0	145
1845	130	115	0	145
1900	120	115	0	145
1930	133	110	0	145
1945	130	110	0	145
2000	130	110	0	145

 STAGE HEAT
 LOSS
 TEMP

→ LOST SLUDGE FEED → MISSED READING @
 1900 → TOOK OUT CEM PROBE

SIGNATURE MAYHEW DATE 10/9 CHECKED _____ DATE _____
PROJECT CRANSTON SEWAGE SLUDGE JOB NO. _____
SUBJECT PROCESS DATA SHEET 1 OF _____ SHEETS

TIME	Head 1	Head 2	Head 3	Head 4	Head 5	Head 6	Affected to the burner Temp	INLET to the Preheater	INLET FAN	GENERATOR INLET	SLUDGE FEED TOTALIZER (lb)	NAT. GAS BURNER (ft ³ /25)
21:15	730	1220	1350	1280	710	550	820	660	90	150	15175.87	435.14
14:30	760	1210	1330	1290	730	540	860	390	80	150	15186.71	435.28
14:45	740	1210	1330	1300	760	530	800	480	90	150	15197.89	435.43
15:00	720	1200	1320	1320	790	520	700	550	90	150	15207.95	435.57
15:15	720	1200	1310	1340	1000	520	610	340	80	150	15212.47	435.66
15:15	720	1200	1310	1340	1110	530	620	380	90	150	15218.58	435.81
15:30	740	1200	1340	1410	1030	520	800	390	90	150	15228.52	436.17
15:45	790	1250	1430	1410	1000	520	1000	440	90	150	15238.63	436.56
16:00	810	1260	1470	1400	980	530	1050	460	90	160	15248.81	436.89
16:15	810	1280	1510	1400	970	530	930	620	90	160	15258.53	437.17
16:30	820	1310	1510	1400	960	530	1080	650	90	160	15268.77	437.54
16:45	840	1330	1510	1400	950	530	1050	750	90	170	15278.81	437.90
17:00	840	1340	1530	1320	840	520	1050	720	90	170	15288.61	438.16
17:15	820	1360	1580	1290	710	530	1110	960	90	180	15298.56	438.59
17:30	830	1360	1510	1280	910	520	950	710	90	170	15308.35	438.87
17:45	800	1340	1470	1280	930	500	1000	420	80	160	15318.64	438.74
18:00	800	1340	1480	1280	940	500	1000	510	90	160	15329.45	438.95
18:15	780	1320	1430	1300	960	500	810	640	90	160	15339.69	439.09
18:30	770	1280	1340	1310	980	560	860	370	80	160	15350.96	439.27
18:45	760	1260	1340	1330	990	500	880	380	80	150	15361.08	439.45
19:00	780	1260	1340	1340	1000	500	910	570	80	150	15372.31	439.67
19:15	780	1240	1330	1350	1010	520	910	500	80	150	15383.13	439.89
19:30	800	1240	1330	1360	1030	520	940	400	80	140	15393.59	440.12
19:45	810	1240	1360	1350	1040	520	980	740	100	160	15404.46	440.36
20:00	870	1280	1460	1340	1050	520	1200	500	90	160	15416.47	440.63
20:15	880	1350	1570	1310	1030	510	1060	810	90	160	15426.37	440.80
20:30	860	1360	1540	1280	1090	510	1030	600	90	160	15437.04	441.09

NOTE
PLAN
Q₂
W/O
Good
Affected to 4500

NOTE
PLAN
Q₂
W/O
Good
Affected to 4500

CALCULATION SHEET

SIGNATURE MAYHUN DATE 10/9 CHECKED _____ DATE _____
PROJECT CRAWSTON JOB NO. _____
SUBJECT SEWAGE SLUDGE PROCESS DATA SHEET 3 OF 4 SHEETS

TIME	1	2	3	4	5	6	7	8	9	10	ST-TOTALIZER	NAT. GAS Totalizer
2045	840	1350	1480	1300	970	510	1020	440	90	160	1545020	44118
2100	840	1360	1460	1280	960	510	920	720	90	160	1545811	44152
2145	830	1330	1450	1290	980	500	960	440	80	160	1547104	44148
2150	820	1320	1440	1300	970	500	950	410	80	160	1548015	44161
2145	800	1300	1400	1300	1000	500	830	670	90	160	1549045	44175
2200	800	1300	1400	1340	1010	500	910	430	80	150	1549981	44190
2215	800	1300	1400	1400	1030	500	930	430	80	150	1551278	44215
2230	800	1290	1410	1360	1020	500	860	710	90	150	1552283	44232
2245	800	1300	1410	1350	1010	500	940	440	80	150	1553300	44247
2300	780	1280	1370	1340	1020	500	900	400	80	150	1554428	44261
2315	780	1270	1360	1300	1040	500	860	500	80	150	1555579	44277
2330	810	1290	1410	1410	1040	500	860	440	80	150	1556568	44303
2345	840	1350	1500	1410	1020	500	1000	860	90	160	1557674	44331
2400	850	1380	1540	1400	1000	500	1060	600	90	160	1558709	44361
2415	840	1360	1500	1400	990	500	1050	480	80	170	1559862	44390
2430	860	1380	1570	1410	1000	510	970	760	100	170	1560909	44415
2445	860	1400	1540	1410	980	510	1000	680	100	170	1561999	44442

SCRUBBER H₂O FLOW = 197 gal/h

SIGNATURE MAYHEW DATE 10/9 CHECKED _____ DATE _____
PROJECT CRANSTON SEWAGE SLUDGE JOB NO. _____
SUBJECT PROCESS DATA SHEET 2 OF _____ SHEETS

TIME	FLUE GAS	AIR VALUE (H ₂ O)	SAMPLE SIZE	CUSTOMER	INT. IN DEPT. PRESS.	VENT. AIR	BURNER #2	BURNER #4	BURNER #6	SPACE HEAT H ₂ O	SPACE HEAT H ₂ O	WASTE HEAT FLOW	ROTARY SPEED
1415	12.2	100	0.4	30	-2	22	0	0	0	160	110	145	1.0
1430	12	80	0.3	30	-2	21	0	0	0	130	110	145	1.0
1445	11.6	80	0.3	20	-3	21.5	0	0	0	130	115	145	1.0
1505	11.8	80	0.3	20	-3	20	0	0	0	130	115	145	1.0
1515	10	80	0.4	20	-24	20	0	0	0	130	110	145	1.0
1530	10.5	80	0.6	20	-24	20	0	0	0	130	115	145	1.0
1545	10.5	80	0.4	20	-2	20	0	0	0	130	115	145	1.0
1600	10.8	80	0.6	25	-2	22.5	0	0	0	124	115	145	1.0
1615	11.2	80	1.0	25	-2	21	0	0	0	130	115	145	1.0
1630	11.8	80	0.8	25	-18	21	0	0	0	130	115	145	1.0
1645	11.8	80	0.2	40	-2	22	0	0	0	130	115	145	1.0
1700	12.3	10	1.6	40	-2	21	0	0	0	130	115	145	1.0
1715	12.6	10	0.9	30	-21	22.5	0	0	0	130	115	145	1.25
1730	12.5	10	0.5	25	-21	22	0	0	0	130	115	145	1.15
1745	12.5	10	0.6	25	-24	22	0	0	0	130	115	145	1.15
1800	12.5	10	0.6	25	-25	19	0	0	0	130	115	145	1.1
1815	12.8	10	0.6	25	-25	19	0	0	0	130	115	145	1.1
1830	12.5	10	0.7	35	-18	19	0	0	0	130	115	145	1.1
1845	12.7	15	0.6	35	-16	20	0	0	0	130	115	145	1.1
1900	11.5	10	1.0	35	-16	20	0	0	0	130	115	145	1.1
1915	10.1	15	1.0	35	-16	20	0	0	0	130	115	145	1.1
1930	9.8	15	1.0	35	-16	20	0	0	0	130	115	145	1.1
1945	10.2	12	1.0	40	-16	22.5	0	0	0	130	115	145	1.1
2000	10.2	30	0.9	40	-16	21	0	0	0	130	110	145	1.0
2030	12.7	25	0.9	45	-12	20	0	0	0	130	110	145	1.0

Plant #2
Gravel
using Radian
data to
confirm
amount.
Cal'd
per hour

CALCULATION SHEET

SIGNATURE MAYHEW

DATE 10/9

CHECKED

CALC. NO.

DATE _____

PROJECT CONVERSION

JOB NO.

SUBJECT Process DATA

SHEET.

OF

-SHEETS

TIME	O ₂	ANIZ VALUE T ₆ %pm	SLUDGE CONC. AIR P	CHTR START AIR VALUE 2 days	INCLINOMETER DRAFT P	AP	Needing Tuned % open	Burner #2 % open	Burner #4 % open	Burner #6	Spec Heat H ₂ O Total	Spec Heat H ₂ O Temp Return	WASTE HEAT ΔT	M.H F.F	CHTR RPM
2045	14.6	20	1.0	45	-16	22.5	100	0	0	0	132	110	0	145	11.0
2100	12.6	20	0.8	35	-2	22	100	0	0	0	130	110	0	145	0.95
2115	12.5	15	0.8	35	-2	20	100	0	0	0	130	110	0	145	1.0
2130	12.8	10	0.8	35	-22	21	90	0	0	0	130	110	0	145	1.0
2145	12.7	10	0.8	35	-22	21	100	0	0	0	130	110	0	145	1.0
2200	12.7	10	0.8	35	-24	20	100	0	0	0	130	110	0	145	1.0
2215	12.3	10	0.8	35	-2	20	90	0	0	0	130	110	0	145	1.0
2230	12.0	35	0.8	40	-16	21	100	0	0	0	128	110	0	145	1.0
2245	12.1	7	0.8	35	-24	19	100	0	0	0	130	105	0	145	1.0
2300	12.3	7	0.8	35	-2	21	85	0	0	0	130	110	0	145	1.0
2315	11.7	30	0.8	35	-16	20	80	0	0	0	128	110	0	145	0.95
2330	11	42	0.6	40	-16	22	45	0	0	0	132	110	0	145	0.95
2345	11.2	0	1.0	40	-16	23.5	100	0	0	0	130	110	0	145	0.95
2400	11.7	0	1.2	40	-19	21	100	0	0	0	127	105	0	145	1.3
2415	12	0	1.2	40	-21	21	100	0	0	0	130	105	0	145	1.3
2430	12.4	10	1.2	40	-2	24	100	0	0	0	130	115	0	145	1.35
2445	12.4	10	1.2	40	-18	20	100	0	0	0	130	115	0	145	1.45

PLANT
O₂
NAT
CURTAIN

down
burner

HOT FURNACE CONDITION
AFTERBURNER = OFF
CALC. NO. _____

SIGNATURE MAY HUN

DATE 10/10

CHECKED

DATE _____

PROJECT CRANSTON SEWAGE SLUDGE

JOB NO.

SUBJECT PROCESS DATA

SHEET 1

OF

SHEETS

TIME	Hourly Temp #1	#2	#3	#4	#5	#6	Air burner Temp of	INT. TO THE FURN. INLET	FD FURN. INLET	CEILING SHAFT OUTLET	SLUDGE FEED TOTALIZER (lb.)	NAT. GAS SCF	SLUDGE FEED POINT = 4800 lb/hr
1115	940	1500	1660	1360	900	580	1170	540	90	180	1607118	45633	
1130	940	1520	1680	1360	920	600	1150	850	100	180	1608156	45673	
1145	920	1520	1680	1350	920	600	1080	850	100	180	1609459	45705	
1200	920	1520	1660	1340	900	580	1120	540	80	180	1610411	45732	
1215	920	1530	1680	1340	930	600	1120	700	100	180	1611570	45771	
1230	910	1540	1680	1350	930	600	1100	700	100	170	1612475	45798	
1245	900	1540	1680	1340	910	580	1140	530	90	180	1613579	45829	
1300	920	1540	1680	1350	930	600	1130	730	90	180	1614675	45862	
1315	900	1530	1660	1340	910	580	1120	560	90	170	1615675	45897	
1330	910	1540	1660	1360	910	580	1140	560	90	180	1616747	45913	
1345	920	1530	1640	1360	920	600	1150	560	80	180	1617874	45944	
1400	920	1530	1640	1380	920	560	1160	150	90	180	1618949	45971	
1415	940	1540	1660	1370	910	570	1160	150	90	180	1619965	45998	
1430	970	1560	1720	1360	920	580	1240	100	100	180	1621218	46036	
1445	960	1540	1710	1310	900	600	1200	570	90	180	1622186	46062	
1500	940	1540	1660	1280	890	570	1050	860	90	180	1623216	46081	
1515	910	1520	1630	1280	900	560	1010	620	90	180	1624324	46102	
1530	900	1500	1580	1320	920	600	1010	610	70	180	1625465	46135	
1545	900	1510	1600	1330	910	580	1040	570	100	170	1626482	46163	
K45	900	1550	1646	1330	900	570	1160	540	70	170	1627931	46274	
1700	930	1560	1700	1340	920	600	1120	450	100	170	1631798	46312	
1715	930	1560	1730	1300	910	580	1160	820	100	170	1632919	46332	
1730	940	1560	1710	1280	900	560	1180	800	100	170	1634052	46348	
1745	930	1560	1700	1270	890	550	1140	820	100	170	1635129	46361	
1800	920	1560	1710	1260	900	550	1160	560	90	170	1636162	46380	
1815	940	1560	1700	1260	900	560	1160	710	90	170	1637286	46407	
1830	920	1560	1710	1260	900	550	1100	940	100	170	1638254	46421	
1845	930	1560	1740	1250	900	550	1200	540	100	170	1639300	46444	
1900	910	1560	1720	1260	910	570	1150	440	100	170	1640421	46470	

HOT FURNACE

CALC. NO. _____

SIGNATURE MAYHEW DATE 10/10/87 CHECKED _____ DATE _____

PROJECT CRANSTON SEWAGE SLUDGE JOB NO. _____

SUBJECT PROCESS DATA SHEET 2 OF _____ SHEETS

TIME	FLUE GAS O ₂	AIR FLOW TO H ₂ O ₂ % open	SAVING AIR FLOW PERCENT	CUTTER FEED RATE (GPM)	INJECTION PRESS.	HEATING AP	WEIGHT (gpm)	SPRINKLER HEAT T. OUTLET	SPACE HEAT T. OUTLET	WEIGHT HEAT T. OUTLET	WEIGHT HEAT T. OUTLET	RPM	NOTE
1115	14.5	100	0.3	12	-22	20	100	130	110	0	145	1.0	0
1130	15	100	0.3	0	-22	22	100	132	115	0	145	1.0	0
1145	14.8	100	0.3	0	-24	21	100	128	115	0	145	1.0	0
1200	15	100	0.3	0	-24	20	100	130	110	0	145	1.0	0
1215	15	100	0.2	0	-24	22.5	100	130	115	0	145	1.0	0
1230	15	100	0.2	0	-25	22	100	128	110	0	145	1.0	0
1245	15	100	0.3	0	-27	23	100	132	110	0	145	1.0	0
1300	15.1	100	0.3	0	-20	18.5	100	130	110	0	145	1.0	0
1315	14.8	100	0.3	0	-20	18.5	100	130	110	0	145	1.0	0
1330	14.6	100	0.3	0	-16	20	20	130	115	0	145	1.0	0
1345	14.6	100	0.3	0	-16	20	20	129	110	0	145	1.0	0
1400	14.3	100	0.3	10	-16	20	15	132	110	0	145	1.0	0
1415	14.3	100	0.3	20	-16	22	30	132	115	0	145	1.0	0
1430	15.5	100	0.3	30	-16	23	100	128	115	0	145	1.0	0
1445	14.3	100	0.3	20	-22	22	100	132	110	0	145	1.5	0
1500	14.5	100	0.3	10	-27	22	100	130	110	0	145	1.5	0
1515	15.4	100	0.2	10	-26	20	100	130	110	0	145	1.5	0
1530	15.1	100	0.2	10	-26	21	100	130	110	0	145	1.5	0
1545	15.1	100	0.2	8	-25	22.5	100	130	115	0	145	1.5	0
1645	15.1	100	0.2	9	-24	22	100	130	115	0	145	1.5	0
1700	15.6	100	0.2	10	-24	23	100	130	115	0	145	1.5	0
1715	15.5	100	0.2	12	-33	21	100	130	110	0	145	1.75	0
1730	15.9	100	0.2	12	-25	24	100	130	110	0	145	1.85	0
1745	16	100	0.2	9	-3	23	100	130	110	0	145	1.9	0
1800	16	100	0.2	9	-26	20	100	130	110	0	145	1.8	0
1815	16	100	0.2	9	-37	24	100	130	115	0	145	1.75	0
1830	15.1	100	0.1	7	-34	27	100	130	110	0	145	1.8	0
1845	16.2	100	0.2	5	-26	27	100	130	110	0	145	1.85	0
1900	15.8	100	0.2	0	-35	24	100	130	115	0	145	1.8	0