0059617

FIELD SCREENING
FINAL DATA DELIVERABLE COVER SHEET

Date: Monday, March 03, 2003

Sample Authorization Form (SAF) Number: F02-002

SDG Number (assigned by Sample Management): FP0075 Dayus 3/3/03

Attachments (check all that apply or N/A):

X	Test Results
N/A	Narrative Summary
N/A	Chain of Custody(s)
X	Logbook Pages
N/A	Anomaly Report

Total number of pages (including cover sheet): ~~6~~ 5 TMD 3/3/03

Comments:
200-ZP-1 Process Sampling and Analysis– VOA - Air

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Analyst Signature — Date: 3/3/03

Reviewer's Signature — Date: 3-11-03

Distribution: CPP Sample Management A0-21
Project (Specify)

Requires distribution to listed project personnel by Sample Management (check if applicable)

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EDMC

0000001

200-ZP-1 Phase III Pump and Treat System

Process Monitoring Field Screening Results

Advanced Data Copy, SAF F02-001/F02-002

				WATER ANALYSES			AIR ANALYSES		
Sample Location	*HEIS Number*	*Sample/ Analysis Date*	*Sample Time*	*TCM (ug/L)*	*CCl_4 (ug/L)*	*TCE (ug/L)*	*TCM (ppmv)*	*CCl_4 (ppmv)*	*TCE (ppmv)*
Field Blank	B15MY7	02/20/03	08:00	<2.0	36	<2.0			
Post Tank T-02-01	B15MY8	02/20/03	08:01	<2.0	34	<2.0			
Post Valve V-01-01	B15MY9	02/20/03	08:05	<2.0	32	<2.0			
Post Tank T-01-01	B15N00	02/20/03	08:07	23	3200	12			
Extraction Well #1	B15RL6	02/20/03	08:09	15	3100	<2.0			
Extraction Well #2	B15RL7	02/20/03	08:11	31	5400	18			
Extraction Well #2 Duplicate	B15RL8	02/20/03	08:11	30	5500	18			
Extraction Well #3	B15RL9	02/20/03	08:23	22	3200	14			
Extraction Well #4	B15RM0	02/20/03	08:25	24	2300	4.9			
Extraction Well #5	B15RM1	02/20/03	08:30	26	1200	2.9			
Post Chiller Air	B16575	02/20/03	08:17		B&K 1302		<1.0	6.3	Not Analyzed For
Stack Effluent	B16576	02/20/03	08:15		B&K 1302		<1.0	<1.0	Not Analyzed For

TCM = Chloroform, CCl = Carbontetrachloride, TCE = Trichloroethylene

(R) = System in Recirculation
(O) = System On-Line

0000002

200-ZP-1 Process Analysis

T.M. JOHANSEN /TM Johansen

MOBILE LABORATORY DATA/LOG SHEET (Logbook HNF-N-293 1, SAF F02-001/F02-002)

Site Name: 200-ZP-1 Phase III **Date: 2/20/03**

Sample Number	HEIS Number	Sample Time	Sample Type	Sampler (Initials)	Analysis Time	Analytical Results			Comments
						TCM ug/L	CCl4 ug/L	TCE ug/L	
DI Blank	-----	0710	Water	TMJ	0939	<2.0	<2.0	<2.0	hs012.d
100ug/L Cal. Check	-----	0930	Water	TMJ	0950	129 129%	133 133%	123 123%	hs013.d; Acceptable recoveries.
DI Blank	-----	0710	Water	TMJ	1001	<2.0	<2.0	<2.0	hs014.d
Field Blank	B15MY7	0800	Water	TMJ	1033	<2.0	36	<2.0	hs017.d;
Z-T2-01	B15MY8	0801	Water	TMJ	1044	<2.0	34	<2.0	Hs018.d;
Z-V1-01	B15MY9	1215	Water	TMJ	1055	<2.0	32	<2.0	Hs019.d
Z-V1-02 MS	-	1215	Water	TMJ	1255	13.1 131%	11.7 117%	15.3 153%	Hs020.d
Z-V1-03 MSD	-	1215	Water	TMJ	1255	13.5 135%	10.3 103%	15.4 154%	Hs021.d(RPD=12.4)
Z-T1-01	B15N00	0807	Water	TMJ	1128	23	3222	12	hs022.d
Z-W1-01	B15RL6	0809	Water	TMJ	1139	15	3131	<2.0	hs023.d
Z-W2-01	B15RL7	0811	Water	TMJ	1149	31	5375	18	hs024.d
Z-W2-02	B15RL8	0811	Water	TMJ	1200	30	5517	18	hs025.d (RPD = 2.6)
Z-W3-01	B15RL9	0823	Water	TMJ	1211	22	3236	14	hs026.d ; Manifold Bldg
Z-W4-01	B15RM0	0825	Water	TMJ	1222	24	2306	4.9	hs027.d ; Manifold Bldg
Z-W5-01	B15RM1	0830	Water	TMJ	1233	26	1169	2.9	hs028.d; Manifold Bldg.
DI Blank	-----	0710	Water	TMJ	1324	<2.0	<2.0	<2.0	hs032.d
3000ug/L Cal. check	-----	1230	Water	TMJ	1335	3050 102%	3275 109%	3221 107%	hs033.d; Acceptable recoveries
DI Blank	-----	0710	Water	TMJ	1346	<2.0	<2.0	<2.0	hs034.d
						ppm	ppm	ppm	
Blank	-----	-----	Air	TMJ	0938	<2.0	<2.0	NA	B&K 1302
25.5 ppm Cal. Check	-----	-----	Air	TMJ	0940	<2.0	21.6 85%	NA	B&K 1302 Acceptable recovery.
Z-A3-01	B16576	1010	Air	TMJ	0942	<2.0	<2.0	NA	B&K 1302
Z-A2-01	B16575	1007	Air	TMJ	0944	<2.0	6.3	NA	B&K 1302
Blank	-----	-----	Air	TMJ	0946	<2.0	<2.0	NA	B&K 1302

For instrument operation information, please refer to logbook HNF-N-292 1, page 22

T.M. JOHANSEN /TM Johansen 2/27/03

2/27/03

200-ZP-1 Process Analysis T.M. JOHANSEN

200-ZP-1 Daily Activity Log
(Logbook HNF-N-292 1, SAF F02-001/F02-002)
Date: 2/20/03

0650	T. M. Johansen arrived on-site at laboratory trailer located at 200-ZP-1 to perform VOA sampling and analysis of the 200-ZP-1 pump and treat samples. Turned on HP 5890 gas chromatograph S/N 3235A47685 and HP 7694 headspace autosampler S/N 3617I01945. Loaded methods HSECDFID.MTH (HP 5890) and HSECDFID.HSM (HP 7694).
0655	Turned on B&K 1302.
0700	Prepared new warm-up standards of 5 and 10 ug/L. Created sample sequence "Z022003.S"
0710	Split flow = 40.6 mL/min. Septum purge = 2.57 mL/min.
0715	Prepared new 50 ug/mL working standard (CAL) from Restek #52893, lot # A011754 parent stock of custom VOA mix (2000 ug/mL). 487.5 uL methanol + 12.5 uL parent stock. Standard number 02/20/03A. Expires 8/20/03.
0725	Prepared new 1000 ug/mL working standard (CAL) from Restek # 52893, lot # A011754 parent stock of custom VOA mix (2000 ug/mL). 250 uL methanol + 250 uL parent stock. Standard number 022003B. Expires 08/20/03.
0735	Prepared new 50 ug/mL working standard (LCS) from Restek #52893, lot # A015859 parent stock of custom VOA mix (2000 ug/mL). 487.5 uL methanol + 12.5 uL parent stock. Standard number 022003A. Expires 8/20/03.
0745	Prepared new 1000 ug/mL working standard (LCS) from Restek # 52893, lot # A015859 parent stock of custom VOA mix (2000 ug/mL). 250 uL methanol + 250 uL parent stock. Standard number 022003B. Expires 8/20/03.
0750	Exited laboratory trailer to collect process water and air samples.
0824	Started calibration of HP 5890 gas chromatograph.
0840	Returned to laboratory trailer with samples. Process samples from extraction well E0-3 and E0-5 collected from manifold house. Extraction well 6 remains off-line.
0928	Completed calibration of HP 5890 gas chromatograph. Calibration curves are acceptable.
0930	Prepared 100 ug/L calibration check standard.
0938	Started analysis of process air samples using the B&K 1302 FTIR S/N 1715232 gas analyzer. For information on this instrument, see logbook HNF-N-294 1.
0948	Completed analysis of process air samples. Analysis results are found on the data sheet in logbook HNF-N-293-1.
0950	100 ug/L calibration check: DCM = 129 (129 %), TCM = 121 (121 %), CCl_4 = 133 (133), TCE = 123 (123 %), PCE = 125 (125 %). Acceptable recoveries.
1033	Started analysis of process water samples.
1035	Prepared matrix spike and matrix spike duplicate. Added 2 uL of 50 ug/mL of LCS parent stock to 10 ml of Z-V1-02 and –03 for a total of 10 ug/L.
1130	Matrix spike recovery for Z-V1-02 and Z-V1-03 not acceptable. It is determined that the LCS parent stock has degraded significantly affecting the recovery of spiked samples. Decide to recollect samples in order to get an acceptable recovery.
1200	Prepared matrix spike and matrix spike duplicate. Added 2 uL of 50 ug/mL of LCS parent stock to 10 ml of Z-V1-02 and –03 for a total of 10 ug/L.
1233	Completed analysis of process water samples.
1255	Matrix spike recovery for Z-V1-02 = 117%
1306	Matrix spike duplicate recovery for Z-V1-03 = 103% Note: Relative Percent Difference = 12.39%
1310	Prepared 3000 ug/L calibration check standard.
1335	3000 ug/L calibration check: DCM = 3024 (101 %), TCM = 3050 (102 %), CCl_4 = 3275 (109%), TCE = 3221 (107 %), PCE = 3305 (110 %).Acceptable Recovery.
1350	Disposed of liquid and solid waste.
1430	Loaded standby method, shut down equipment, left site.

Data recorded in real time using a laptop computer.

T.M. JOHANSEN 2/25/03

2/25/03

200-ZP-1 Process Analysis

T.M. JOHANSEN TM Johansen

200-ZP-1 Daily Activity Log
(Logbook HNF-N-294 1, F02-002)
Date: 2/20/03

0710	T. M. Johansen arrived on-site at laboratory trailer located at 200-ZP-1 to perform Quarterly VOA sampling and analysis of the 200-ZP-1 pump and treat.
0712	Turned on B&K 1302 FTIR gas analyzer, serial number 1715232 to warm up instrument prior to analysis. The B&K 1302 is set up using cross compensation factory calibrations.
0715	Placed instrument into automatic sampling mode (ambient air).
0930	Turned off automatic sampling mode.
0938	Analyzed blank air sample: TCM = < 1.0 , CCl_4 = < 1.0 ,TCE = NAF .
0940	Analyzed 25.5 ppm calibration standard. CCl_4 = 21.6 (85 %). Acceptable recovery.
0942	Started analysis of 200-ZP-1 samples.
0948	Completed analysis of 200-ZP-1 samples.
0950	Turned instrument off.

Data was recorded in real time using a laptop computer.

TMJohansen 2/27/03

TM 2/27/03

T.M. JOHANSEN TMJohansen 2/27/03