0058773

FIELD SCREENING
FINAL DATA DELIVERABLE COVER SHEET

Date: Monday, January 13, 2003

Sample Authorization Form (SAF) Number: F02-002

SDG Number (assigned by Sample Management): FP0056 Dayes 1/13/03

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): 5

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

JAN 2003 RECEIVED

RECEIVED FEB 18 2003 EDMC

Analyst Signature — Date 1/13/03

Reviewer's Signature — Date 1-21-03

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

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

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	B15MV3	11/21/02	07:44	<2.0	13	<2.0			
Injection Well #2	B15MV4	11/21/02	08:23	<2.0	<2.0	<2.0			
Post Tank T-02-01	B15MV5	11/21/02	07:45	<2.0	14	<2.0			
Post Valve V-01-01	B15MV6	11/21/02	07:49	<2.0	12	<2.0			
Effluent Filter B, F2B-01	B15MV7	11/21/02	07:47	<2.0	13	<2.0			
Post Tank T-01-01	B15MV8	11/21/02	07:51	20	3600	9.2			
Extraction Well #2	B13NK0	11/21/02	07:53	25	6000	12			
Extraction Well #3	B13NK1	11/21/02	08:15	17	3500	9.9			
Extraction Well #4	B13NK2	11/21/02	08:17	20	2800	4.5			
Extraction Well #4 Duplicate	B15RJ1	11/21/02	08:17	20	2900	4.6			
Extraction Well #5	B15RJ2	11/21/02	08:20	21	1300	3.2			
Post Chiller Air	B13P54	11/21/02	07:57		B&K 1302		<1.0	7.5	Not Analyzed For
Stack Effluent	B13P55	11/21/02	07:55		B&K 1302		<1.0	<1.0	Not Analyzed For

TCM = Chloroform, CCl_4 = Carbontetrachloride, TCE = Trichloroethylene

200-ZP-1 Process Analysis,
200-ZP-1 GW

T.M. JOHANSEN [signature] 11/25/02

MOBILE LABORATORY DATA/LOG SHEET
(Logbook HNF-N-293 1, SAF F02-001/F02-002/C02-043)

Site Name: 200-ZP-1 Phase III, 200-ZP-1 GW — 11/21/02

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	----	0700	Water	TMJ	0941	<2.0	<2.0	<2.0	hs012.d
100ug/L Cal. Check	----	0920	Water	TMJ	0952	109 109%	109 109%	104 104%	hs013.d; Acceptable recoveries.
DI Blank	----	0700	Water	TMJ	1003	<2.0	<2.0	<2.0	hs014.d
299-W15-31A DLY184	B15XH6	0715	Water	TMJ	1036	<2.0	<2.0	<2.0	Hs017.d;11/14/02
Z-INJ-01	B15MV4	0823	Water	TMJ	1046	<2.0	<2.0	<2.0	hs018.d; Manifold bldg.
Field Blank	B15MV3	0744	Water	TMJ	1057	<2.0	13	<2.0	hs019.d;
Z-T2-01	B15MV5	0745	Water	TMJ	1108	<2.0	14	<2.0	hs020.d;
Z-V1-01	B15MV6	0749	Water	TMJ	1119	<2.0	12	<2.0	hs021.d
Z-FB2-01	B15MV7	0747	Water	TMJ	1130	<2.0	13	<2.0	hs022.d
Z-V1-02 MS	-	0749	Water	TMJ	1152	11.4 114%	15.5 155%	11.5 115%	hs024.d
Z-V1-03 MSD	-	0749	Water	TMJ	1214	11.9 119%	19.6 196%	12.5 125%	hs027.d (RPD = 23.4)
Z-T1-01	B15MV8	0751	Water	TMJ	1141	20	3638	9.2	hs023.d
Z-W2-01	B13NK0	0753	Water	TMJ	1203	25	5987	12	hs026d
Z-W3-01	B13NK1	0815	Water	TMJ	1224	17	3512	9.9	hs028.d; Manifold bldg.
Z-W4-01	B13NK2	0817	Water	TMJ	1235	20	2806	4.5	hs029.d; Manifold bldg.
Z-W4-02	B15RJ1	0817	Water	TMJ	1245	20	2871	4.6	hs030.d; Manifold Bldg.(RPD=2.3)
Z-W5-01	B15RJ2	0820	Water	TMJ	1257	21	1302	3.2	Hs031.d; Manifold bldg.
299-W15-31A	B15XH5	1013	Water	TMJ	1308	30	4962	4.0	Hs032.d;11/14/02
3000ug/L Cal. check	-----	1248	Water	TMJ	1319	3093 103%	3188 106%	3111 104%	hs033.d; Acceptable recoveries
DI Blank	----	0700	Water	TMJ	1330	<2.0	<2.0	<2.0	hs034.d
						ppm	ppm	ppm	
Blank	-----	-----	Air	TMJ	0925	<1.0	<1.0	NA	B&K 1302
25.5 ppm Cal. Check	-----	-----	Air	TMJ	0927	<1.0	22.6 89%	NA	B&K 1302 Acceptable recovery.
Z-A3-01	B13P55	0755	Air	TMJ	0929	<1.0	<1.0	NA	B&K 1302
Z-A2-01	B13P54	0757	Air	TMJ	0931	<1.0	7.54	NA	B&K 1302
Blank	-----	-----	Air	TMJ	0933	<1.0	<1.0	NA	B&K 1302

For instrument operation information, please refer to logbook HNF-N-292 1, page 16.

[signature] 11/25/02

0000003

T.M. JOHANSEN [signature] 11/25/02

Reviewed By M.A. Baechler
M.A. Baechler 11/26/02

200-ZP-1 Process Analysis/200-ZP-1 GW

T.M. JOHANSEN 11/25/02

200-ZP-1 Daily Activity Log/200-ZP-1 GW
(Log HNF-N-292 1, SAF F02-001/F02-002/C02-043)
Date: 11/21/02

0700	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 and 200-ZP-1 Groundwater 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).
0705	Turned on B&K 1302.
0707	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 112102A. Expires 5/21/03.
0715	Prepared new warm-up standards of 5 and 10 ug/L. Created sample sequence "Z112102.S"
0722	Split flow = 40.3 mL/min. Septum purge = 2.75 mL/min.
0735	Prepared calibration standards of 5, 100, 200, 2000, 4000, and 8000 ug/L.
0750	Exited laboratory trailer to collect process water and air samples.
0825	Started calibration of HP 5890 gas chromatograph.
0830	Returned to laboratory trailer with samples. Process samples from extraction well E0-3, E0-4, and E0-5 collected from manifold house. Extraction wells 1 and 6 are off-line.
0919	Completed calibration of HP 5890 gas chromatograph. Calibration curves are acceptable.
0920	Prepared 100 ug/L calibration check standard.
0925	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.
0935	Completed analysis of process air samples. Analysis results are found on the data sheet in logbook HNF-N-293-1.
0952	100 ug/L calibration check: DCM = 107 (107 %), TCM = 109 (109 %), CCl_4 = 109 (109 %), TCE = 104 (104 %), PCE = 101 (101 %). Acceptable recoveries.
1000	Prepared Groundwater samples (B15XH5 and B15XH6) for analysis by transfering 10 mL sample to a clean headspace vial by pepette.
1046	Started analysis of process water samples.
1115	Prepared matrix spike and matrix spike duplicate. Added 2 u/L of 50 ug/mL of LCS parent stock to 10 ml of Z-V1-02 and –03 for a total of 10 ug/L.
1152	Matrix spike recovery for Z-V1-02 = 155%
1214	Matrix spike duplicate recovery for Z-V1-03 = 196% Note: Relative Percent Difference = 23.4%
1248	Prepared 3000 ug/L calibration check standard.
1257	Completed analysis of process water samples.
1319	3000 ug/L calibration check: DCM = 3179 (106%), TCM = 3093 (103%), CCl_4 = 3188 (106 %), TCE = 3111 (104 %), PCE = 3125 (104 %).Acceptable Rec.
1330	Disposed of liquid and solid waste.
1350	Loaded standby method, shut down equipment, left site.

Data recorded in real time using a laptop computer.

T.M. JOHANSEN 11/25/02

Reviewed By: M.G. Baechler 11/26/02

200-ZP-1 Process Analysis

T.M. JOHANSEN 11/25/02

200-ZP-1 Daily Activity Log
(Logbook HNF-N-294 1, F02-002)
Date: 11/21/02

0700	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.
0705	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.
0707	Placed instrument into automatic sampling mode (ambient air).
0923	Turned off automatic sampling mode.
0925	Analyzed blank air sample: TCM = < 1.0 , CCl_4 = < 1.0 ,TCE = NAF .
0927	Analyzed 25.5 ppm calibration standard. CCl_4 = 22.6(89 %). Acceptable recovery.
0929	Started analysis of 200-ZP-1 samples.
0935	Completed analysis of 200-ZP-1 samples.
0937	Turned instrument off.

Data was recorded in real time using a laptop computer.

Tamara Johansen 11/25/02

TMJ 11/25/02

T.M. JOHANSEN 11/25/02

Reviewed By M.A. Boechler M.A. Boechler 11/26/02