0058733

FIELD SCREENING
FINAL DATA DELIVERABLE COVER SHEET

Date: Thursday, December 05, 2002

Sample Authorization Form (SAF) Number: F02-002

SDG Number (assigned by Sample Management): FP0049 Dayes 12/11/02

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

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DEC 2002
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M. G. Bachler
Analyst Signature

12/5/02
Date

D Walker
Reviewer's Signature

12/16/02
Date

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

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

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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	B15MV9	12/04/02	07:21	<2.0	11	<2.0			
Injection Well #2	B15MW0	12/04/02	08:09	<2.0	<2.0	<2.0			
Post Tank T-02-01	B15MW1	12/04/02	07:22	<2.0	11	<2.0			
Post Valve V-01-01	B15MW2	12/04/02	07:27	<2.0	12	<2.0			
Effluent Filter B, F2B-01	B15MW3	12/04/02	07:24	<2.0	11	<2.0			
Post Tank T-01-01	B15MW4	12/04/02	07:29	17	3100	6.7			
Extraction Well #2	B15RJ3	12/04/02	07:31	22	5300	9.6			
Extraction Well #3	B15RJ4	12/04/02	07:55	16	3300	8.5			
Extraction Well #4	B15RJ5	12/04/02	07:57	18	2500	3.2			
Extraction Well #5	B15RJ6	12/04/02	08:01	19	1100	<2.0			
Extraction Well #5 Duplicate	B15RJ7	12/04/02	08:01	19	1100	<2.0			
Post Chiller Air	B13P56	12/04/02	07:37		B&K 1302		<1.0	5.7	Not Analyzed For
Stack Effluent	B13P57	12/04/02	07:35		B&K 1302		<1.0	<1.0	Not Analyzed For

TCM = Chloroform, CCl_4 = Carbontetrachloride, TCE = Trichloroethylene

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200-ZP-1 Process Analysis

M.A. BAECHLER / TS / M.A. Baechler 12/5/02

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

Site Name: 200-ZP-1 Phase III **Date: 12/04/02**

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	-----	0650	Water	MAB	0917	<2.0	<2.0	<2.0	hs012.d
100ug/L Cal. Check	-----	0832	Water	MAB	0928	103 103%	105 105%	100 100%	hs013.d; Acceptable recoveries.
DI Blank	-----	0650	Water	MAB	0939	<2.0	<2.0	<2.0	hs014.d
Z-INJ-01	B15MW0	0809	Water	MAB	1011	<2.0	<2.0	<2.0	hs017.d; Manifold bldg.
Field Blank	B15MV9	0721	Water	MAB	1022	<2.0	11	<2.0	hs018.d;
Z-T2-01	B15MW1	0722	Water	MAB	1033	<2.0	11	<2.0	hs019.d;
Z-V1-01	B15MW2	0727	Water	MAB	1044	<2.0	12	<2.0	hs020.d
Z-FB2-01	B15MW3	0724	Water	MAB	1055	<2.0	11	<2.0	hs021.d
Z-T2-02 MS	-	0722	Water	MAB	1105	10.6 106%	10.4 104%	9.7 97%	hs022.d
Z-T2-03 MSD	-	0722	Water	MAB	1116	10.0 100%	10.5 105%	9.2 92%	hs023.d (RPD = 0.96)
Z-T1-01	B15MW4	0729	Water	MAB	1127	17	3100	6.7	hs024.d
Z-W2-01	B15RJ3	0731	Water	MAB	1138	22	5269	9.6	hs025.d
Z-W3-01	B15RJ4	0755	Water	MAB	1149	16	3300	8.5	hs026.d
Z-W4-01	B15RJ5	0757	Water	MAB	1159	18	2471	3.2	hs027.d; Manifold bldg
Z-W5-01	B15RJ6	0801	Water	MAB	1210	19	1084	<2.0	hs028.d; Manifold Bldg.
Z-W5-02	B15RJ7	0801	Water	MAB	1221	19	1107	<2.0	hs029.d; Manifold bldg (RPD=2.10)
DI Blank	-----	0650	Water	MAB	1232	<2.0	<2.0	<2.0	hs030.d
3000ug/L Cal. check	-----	1201	Water	MAB	1243	2890 96%	2666 89%	2725 91%	hs031.d; Acceptable recoveries
DI Blank	-----	0650	Water	MAB	1254	<2.0	<2.0	<2.0	hs032.d
						ppm	ppm	ppm	
Blank	-----	-----	Air	MAB	0741	<1.0	<1.0	NA	B&K 1302
25.5 ppm Cal. Check	-----	-----	Air	MAB	0743	<1.0	22.5 88%	NA	B&K 1302 Acceptable recovery.
Z-A3-01	B13P57	0735	Air	MAB	0745	<1.0	<1.0	NA	B&K 1302
Z-A2-01	B13P56	0737	Air	MAB	0747	<1.0	5.68	NA	B&K 1302
Blank	-----	-----	Air	MAB	0749	<1.0	<1.0	NA	B&K 1302

For instrument operation information, please refer to logbook HNF-N-292 1, page 17.

M.A. Baechler 12/5/02

M.A. BAECHLER / M.A. Baechler 12/5/02

Reviewed By [signature] 12/5/02

200-ZP-1 Process Analysis

M.A. BAECHLER / TS / M.A. Baechler 12/4/02

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MAB 12/5/02

200-ZP-1 Daily Activity Log
(Logbook HNF-N-294 1, F02-002)
Date: 12/04/02

0650	M. A. Baechler 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.
0651	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.
0652	Placed instrument into automatic sampling mode (ambient air).
0740	Turned off automatic sampling mode.
0741	Analyzed blank air sample: TCM = < 1.0 , CCl_4 = < 1.0 ,TCE = NAF .
0743	Analyzed 25.5 ppm calibration standard. CCl_4 = 22.5 (88 %). Acceptable recovery.
0745	Started analysis of 200-ZP-1 samples.
0747	Completed analysis of 200-ZP-1 samples.
0755	Turned instrument off.

Data was recorded in real time using a laptop computer.

M.A. Baechler 12/5/02

MAB 12/5/02

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Reviewed By [illegible] 12/5/02

M.A. BAECHLER / M.A. Baechler 12/5/02

200-ZP-1 Process Analysis M.A. BAECHLER /TS/ M.A. Baechler 12/5/02

200-ZP-1 Daily Activity Log
(Logbook HNF-N-292 1, SAF F02-001/F02-002)
Date: 12/04/02

0650	M. A. Baechler 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.
0702	Split flow = 40.0 mL/min. Septum purge = 2.69 mL/min.
0703	Prepared new warm-up standards of 5 and 10 ug/L. Created sample sequence "Z120402.S"
0708	Prepared calibration standards of 5, 100, 200, 2000, 4000, and 8000 ug/L.
0715	Exited laboratory trailer to collect process water and air samples.
0741	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.
0751	Completed analysis of process air samples. Analysis results are found on the data sheet in logbook HNF-N-293-1.
0801	Started calibration of HP 5890 gas chromatograph.
0815	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.
0832	Prepared 100 ug/L calibration check standard.
0855	Completed calibration of HP 5890 gas chromatograph. Calibration curves are acceptable.
0928	100 ug/L calibration check: DCM = 97 (97 %), TCM = 103 (103 %), CCl_4 = 105 (105 %), TCE = 100 (100 %), PCE = 100 (100 %). Acceptable recoveries.
1011	Started analysis of process water samples.
1014	Prepared matrix spike and matrix spike duplicate. Added 2 uL of 50 ug/mL of LCS parent stock to 10 ml of Z-T2-02 and –03 for a total of 10 ug/L.
1105	Matrix spike recovery for Z-T2-02 = 104 %
1116	Matrix spike duplicate recovery for Z-T2-03 = 105 % Note: Relative Percent Difference = 0.96 %
1201	Prepared 3000 ug/L calibration check standard.
1221	Completed analysis of process water samples.
1243	3000 ug/L calibration check: DCM = 3041 (101 %), TCM = 2890 (96 %), CCl_4 = 2666 (89 %), TCE = 2724 (91 %), PCE = 2589 (86 %).Acceptable Rec. MAB 12/5/02
1255	Disposed of liquid and solid waste.
1345	Loaded standby method, shut down equipment, left site.

Data recorded in real time using a laptop computer.

M.A. Baechler 12/5/02

M.A. BAECHLER /M.A. Baechler 12/5/02

Reviewed By [signature] 12/5/02