

FIELD SCREENING FINAL DATA DELIVERABLE COVER SHEET

Date: Monday, October 16, 2006

Sample Authorization Form (SAF) Number: F02-001

SDG Number (assigned by Sample Management): FP0348 Dayes

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

<input checked="" type="checkbox"/>	Test Results
<input type="checkbox"/>	Narrative Summary
<input checked="" type="checkbox"/>	Chain of Custody(s)
<input checked="" type="checkbox"/>	Logbook Pages
<input type="checkbox"/>	Anomaly Report

10/19/06
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JUN 03 2010
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Total number of pages (including cover sheet): 8

Comments:

**200-ZP-1 Process Sampling and Analysis- VOA -
Water**

THESE TESTS WERE CONDUCTED USING QC-2



James Johnson
Analyst Signature

M. A. Bucher
Reviewer's Signature

10/16/06
Date

10/25/06
Date

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

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

200-ZP-1 Phase III Pump and Treat System
Process Monitoring Field Screening Results
Advanced Data Copy, SAF F02-001/F02-002

SAMPLE RESULTS

09-21-06 - September 2006 Monthly

Sample Location	HEIS Number	Well Number	Pump Intake Depth (ft)	Sample/ Analysis Date	Sample Time	WATER ANALYSES			AIR ANALYSES		
						TCM (µg/L)	CCl ₄ (µg/L)	TCE (µg/L)	TCM (ppmv)	CCl ₄ (ppmv)	TCE (ppmv)
Field Blank	B1KL25	N/A	N/A	09/21/06	06:50	<2.0	<2.0	<2.0			
Post Tank T-02-01	B1KL26	N/A	N/A	09/21/06	06:52	<2.0	<2.0	<2.0			
Post Valve V-01-01	B1KL27	N/A	N/A	09/21/06	06:55	<2.0	<2.0	<2.0			
Post Tank T-01-01	B1KL28	N/A	N/A	09/21/06	06:57	12	2000	6.1			
Extraction Well #1	B1KL29	299-W15-45	280.6	09/21/06	07:00	7.8	1500	<2.0			
Extraction Well #2	B1KL30	299-W15-34	258.51	09/21/06	07:03	17	3300	5.7			
Extraction Well #3	B1KL31	299-W15-35	249.4	09/21/06	08:00	12	2000	6.3			
Extraction Well #3 Duplicate	B1KL32	299-W15-35	254	09/21/06	08:00	12	2100	6.4			
Extraction Well #4	B1KL33	299-W15-47	278	09/21/06	08:20	13	1400	4.4			
Extraction Well #5	Off-Line										
Extraction Well #7	B1KL35	299-W15-40	250.22	09/21/06	7:06	14	2800	15			
Extraction Well #8	B1KL36	299-W15-43	278	09/21/06	7:09	9.7	1900	4.3			
Extraction Well #9	B1KL37	299-W15-44	258.15	09/21/06	7:11	13	2600	13			
Extraction Well #10	B1KL38	299-W15-765	251.97	09/21/06	7:15	14	2900	13			
Stack Effluent (Z-A3-01)	B1KL39	N/A	N/A	09/21/06	07:20		B&K 1302		<1.0	<1.0	Not Analyzed
Post Chiller Air (Z-A2-01)	B1KL40	N/A	N/A	09/21/06	07:27		B&K 1302		<1.0	10.4	Not Analyzed

00000002

MO-612 Field GC Daily Activity Log (Logbook HNF-N-292 2 SAFs F02-001/F02-002) Date: 09/21/06

0835	D. Todak arrived on-site at MO-612 laboratory trailer located at 200-ZP-1 to perform monthly sampling and analysis of the 200-ZP-1 pump and treat. Turned on HP 6890N gas chromatograph S/N US10437002 and HP G1888 headspace autosampler S/N IT00430023. Loaded method HSECFID.M.
0905	Created sample sequence "Z060921.S".
0908	Split / splitless inlet vent = 42.0 mL/min. Septum purge vent = 2.26 mL/min.
0920	Prepared calibration standards of 5, 100, 200, 2000, 4000, and 8000 µg/L.
0928	Started sequence. ECD signal = 216.5
0957	Started calibration of HP 6890N gas chromatograph.
1051	Completed calibration.
1054	Prepared 100 µg/L LCS calibration check standard.
1055	D. Todak started preparing process water samples for analysis.
1145	100 µg/L calibration check: Recoveries of approximately 50 µg/L. Suspect error in preparation. Re-prep 100 µg/L LCS calibration check standard.
1157	100 µg/L calibration check: DCM = 98.4 (98 %), TCM =94.3 (94 %), CCl ₄ =94.1 (94 %), TCE = 93.5 (94%), PCE =92.9 (93%). Acceptable recoveries.
1224	Prepared matrix spike and matrix spike duplicate. Added 2 µL of 50 µg/mL of LCS parent stock to 10 mL of V1-02MS and V1-03MSD for a total of 10 µg/L per sample.
1229	Started analysis of process water samples.
1302	Matrix spike recovery for V1-02MS = 97%.
1313	Matrix spike duplicate recovery for V1-03MSD = 96%. Relative Percent Difference (RPD) = 1.1%.
1512	Prepared 3000 µg/L calibration check standard.
1513	Completed analysis of process water samples.
1535	3000 µg/L calibration check: DCM = 3042 (101 %), TCM = 3003 (100%), CCl ₄ = 3401 (113%), TCE = 3026 (101%), PCE = 3017 (101%). Acceptable recoveries.
1556	Sequence run completed. Saved sequence "Z060921.S". Saved method HSECFID.M with annotation "ZP-1 Monthly - 09-21-06".
1616	Loaded standby method and shut down computer equipment.
1618	Turned off inside hydrogen and breathing air supply valves. Turned off outside hydrogen and breathing air gas bottle valves.
1620	Disposed of liquid and solid waste.
1625	Left trailer.

Data recorded in real time using the GC computer in MO-612.

D. TODAK
~~GS~~
10/10/06

D. TODAK

OCT 10 2006

Reviewed by: Thad Hansen
Thad Hansen 10/11/06

00000003

MOBILE LABORATORY DATA/LOG SHEET (Logbook HNF-N-293 1, SAF F02-001/F02-002)
Site Name: 200-ZP-1 Phase III (Monthly) Date: 09-21-06

Sample Number	HEIS Number	Sample Time	Sample Type	Sampler (Initials)	Analysis Time	Analytical Results			Comments
						TCM µg/L	CC14 µg/L	TCE µg/L	
DI Blank	---	0915	Water	DT	1113	<2.0	<2.0	<2.0	hs010.d
100µg/L Cal. Check	---	1054	Water	DT	1157	94.3 94%	94.1 94%	93.5 94%	hs014.d; Acceptable recoveries.
DI Blank	---	0915	Water	DT	1208	<2.0	<2.0	<2.0	hs015.d
Field Blank	B1KL25	0650	Water	WW	1229	<2.0	<2.0	<2.0	hs017.d
Z-T2-01	B1KL26	0650	Water	WW	1240	<2.0	<2.0	<2.0	hs018.d
Z-V1-01	B1KL27	0650	Water	WW	1251	<2.0	<2.0	<2.0	hs019.d
Z-V1-02 MS	---	0650	Water	WW	1302	9.4 94%	9.7 97%	9.1 91%	hs020.d
Z-V1-03 MSD	---	0650	Water	WW	1313	9.3 93%	9.6 96%	9.0 90%	hs021.d; (RPD=1.1%)
Z-T1-01	B1KL28	0650	Water	WW	1324	12	2000	6.1	hs022.d
Z-W1-01	B1KL29	0650	Water	WW	1335	7.8	1500	<2.0	hs023.d
Z-W2-01	B1KL30	0650	Water	WW	1346	17	3300	5.7	hs024.d
Z-W3-01	B1KL31	0650	Water	WW	1357	12	2000	6.3	hs025.d; Manifold Bldg.
Z-W3-02 Duplicate	B1KL32	0650	Water	WW	1407	12	2100	6.4	hs026.d; Manifold Bldg. (RPD=4.9%)
Z-W4-01	B1KL33	0650	Water	WW	1418	13	1400	4.4	hs027.d; Manifold Bldg.
Z-W5-01	B1KL34	Well Offline							
Z-W7-01	B1KL35	0650	Water	WW	1429	14	2800	15	hs028.d
Z-W8-01	B1KL36	0650	Water	WW	1440	9.7	1900	4.3	hs029.d
Z-W9-01	B1KL37	0650	Water	WW	1451	13	2600	13	hs030.d
Z-W10-01	B1KL38	0650	Water	WW	1502	14	2900	13	hs031.d
CS102, I-1	B1JX20	9/19/06 1435	Water	KH	1513	4.76	80.7	<2.0	hs032.d PCE=4.0
DI Blank	---	0915	Water	DT	1524	<2.0	<2.0	<2.0	hs033.d
3000µg/L Cal. Check	---	1512	Water	DT	1535	3003 101% 100	3401 113%	3026 101%	hs034.d; Acceptable recoveries.
DI Blank	---	0915	Water	DT	1556	<2.0	<2.0	<2.0	hs036.d
Blank	---	---	Air	---	1133	<1.0	<1.0	NA	B&K 1302
25.37 ppm Cal. Check	---	---	Air	---	1135	NA	21.5 85%	NA	B&K 1302 Acceptable recovery.
Z-A3-01	B1KL39	0650	Air	WW	1138	<1.0	<1.0	NA	B&K 1302
Z-A2-01	B1KL40	0650	Air	WW	1140	<1.0	10.4	NA	B&K 1302
Blank	---	---	Air	---	1142	<1.0	<1.0	NA	B&K 1302

D. TODAK
10-10-06

0652
0655
0700
0703
0800
0820
0700
0709
0711
0715

BEST AVAILABLE
COPY

Data recorded in real time using the GC computer in MO-612. For instrument operation information, refer to logbooks HNF-N-292 2 p.2and HNF-N-294 1, p.53

D. TODAK
OCT 10 2006

Reviewed by: Theobalden
10/11/06

200-ZP-1 Daily Activity Log (Logbook HNF-N-294 1, F02-002)

Date: 09/21/06

D. TODAK
10-10-06

0835	D. Todak on-site at MO-612 field laboratory trailer located at 200-ZP-1 to perform VOA sampling and analysis of the 200-ZP-1 pump and treat.
0840	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.
0840	Placed instrument into automatic sampling mode (ambient air).
0845	Vapor samples B1KL39 (AS-3) and B1KL40 (AS-2) delivered by W. Wise.
1133	Analyzed blank air sample: TCM = <1.0 ppm, CCl ₄ = <1.0 ppm, TCE = NAF.
1135	Analyzed 25.37 ppm calibration standard. CCl ₄ = 21.5 ppm (85%). Acceptable recovery.
1138	Started analysis of 200-ZP-1 samples.
1139	Completed analysis of 200-ZP-1 samples.
1152	Turned instrument off.

Data was recorded in real time using the GC computer in MO-612.

D. TODAK

OCT 10 2006

Reviewed by: J. Johnson /
J. Johnson 10/10/06

COLLECTOR
Pfister/Pope/Mokler/Hughes *Wise*

COMPANY CONTACT
CLEMENTS, RL

TELEPHONE NO.
372-1761

PROJECT COORDINATOR
TRENT, SJ

PRICE CODE **FIELD** **DATA TURNAROUND**

AIR QUALITY **0 Days / 0 Days**

SAMPLING LOCATION
200-ZP-1

PROJECT DESIGNATION
200-ZP-1 Pump & Treat Bi-Weekly and Quarterly Process Monitoring

SAF NO.
F02-001

ICE CHEST NO.

FIELD LOGBOOK NO.

COA
119325ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Field Analysis Activities

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum
Liquids
DS=Drum
Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993) N/A

SPECIAL HANDLING AND/OR STORAGE
N/A

PRESERVATION	Cool 4C																		
TYPE OF CONTAINER	aGs*																		
NO. OF CONTAINER(S)	3																		
VOLUME	40mL																		
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS																		

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME																
B1KL25	WATER	9-21-06	0650	-															
B1KL26	WATER	9-21-06	06502	✓															
B1KL27	WATER	9-21-06	06505	✓															
B1KL28	WATER	9-21-06	06507	-															
B1KL29	WATER	9-21-06	0650 0700	✓															

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
<i>W. Pfister</i>	9-21-06/0845	<i>D. TODAK</i>	9-21-06/0845
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
(1)VOLATILE ORGANICS BY FIELD GC {Carbon tetrachloride, Chloroform, Trichloroethene}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME
	<i>Return to Project</i>	<i>Dave Todak</i>	<i>9/21/06 1500</i>

00000000

COLLECTOR Pfister/Pope/Mokler/Hughes / <i>Wise</i>		COMPANY CONTACT CLEMENTS, RL		TELEPHONE NO. 372-1761	PROJECT COORDINATOR TRENT, SJ	PRICE CODE	FIELD	DATA TURNAROUND 0 Days / 0 Days
SAMPLING LOCATION 200-ZP-1		PROJECT DESIGNATION 200-ZP-1 Pump & Treat Bi-Weekly and Quarterly Process Monitoring			SAF NO. F02-001	AIR QUALITY	<input type="checkbox"/>	
ICE CHEST NO.		FIELD LOGBOOK NO.		COA 119325ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Field Analysis Activities		OFFSITE PROPERTY NO. N/A			BILL OF LADING/AIR BILL NO. N/A			

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993) N/A	PRESERVATION	Cool 4C															
	TYPE OF CONTAINER	aGs*																
	NO. OF CONTAINER(S)	3																
	VOLUME	40mL																
	SPECIAL HANDLING AND/OR STORAGE N/A	SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS															

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME															
B1KL30	WATER	9-21-06	0650 0703 ✓															
B1KL31	WATER	9-21-06	0650 0800 ✓															
B1KL32	WATER	9-21-06	0650 0800 ✓															
B1KL33	WATER	9-21-06	0650 0820 ✓															
B1KL34	WATER	9-21-06	0650 0820 ✓															

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
<i>Wm. Lisek</i>	9-21-06/0845	<i>D. TODAK</i>	9-21-06/0845
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
(1)VOLATILE ORGANICS BY FIELD GC {Carbon tetrachloride, Chloroform, Trichloroethene}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD Return to Project	DISPOSED BY Dave Todak	DATE/TIME 9/21/06 1500

00000007

COLLECTOR Pfister/Pope/Mokler/Hughes / <i>Wise</i>		COMPANY CONTACT CLEMENTS, RL	TELEPHONE NO. 372-1761	PROJECT COORDINATOR TRENT, SJ	PRICE CODE	FIELD	DATA TURNAROUND 0 Days / 0 Days
SAMPLING LOCATION 200-ZP-1		PROJECT DESIGNATION 200-ZP-1 Pump & Treat Bi-Weekly and Quarterly Process Monitoring		SAF NO. F02-001	AIR QUALITY <input type="checkbox"/>		
ICE CHEST NO.		FIELD LOGBOOK NO.	COA 119325ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Field Analysis Activities		OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A			

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993) N/A	PRESERVATION	Cool 4C																	
		TYPE OF CONTAINER	aGs*																	
		NO. OF CONTAINER(S)	3																	
		VOLUME	40mL																	
SPECIAL HANDLING AND/OR STORAGE N/A		SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS																	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME																
B1KL35	WATER	9-21-06	0650 0706 ✓																
B1KL36	WATER	9-21-06	0650 0709 ✓																
B1KL37	WATER	9-21-06	0650 0711 ✓																
B1KL38	WATER	9-21-06	0650 0715 ✓																

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	(1)VOLATILE ORGANICS BY FIELD GC {Carbon tetrachloride, Chloroform, Trichloroethene}	
<i>W.M. Wise</i>	9-21-06/0845	<i>D. TODAK</i>	9-21-06/0845		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME
	<i>Return to Project</i>	<i>Dave Todak</i>	<i>9/21/06 1500</i>