

FIELD SCREENING FINAL DATA DELIVERABLE COVER SHEET

Date: Wednesday, October 31, 2007

Sample Authorization Form (SAF) Number: F02-001

SDG Number (assigned by Sample Management): FP0514 Reyes
12/29/07

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

- Test Results
- Narrative Summary
- Chain of Custody(s)
- Logbook Pages
- Anomaly Report

Total number of pages (including cover sheet): 78 pages
11/1/08

Comments:
200-ZP-1 Process Sampling and Analysis- VOA - Water

THESE TESTS WERE CONDUCTED USING QC-2

[Signature]
Analyst Signature

[Signature]
Reviewer's Signature

10/31/07
Date

12/31/07
Date

RECEIVED

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

DEC 31 2007

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

RECEIVED
MAY 06 2008

EDMC

00000001

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

10/02/07 - Monthly

SAMPLE RESULTS

Sample Location	HEIS Number	Well Number	Pump Intake Depth (ft)	Sample/Analysis Date	Sample Time	WATER ANALYSES			AIR ANALYSES		
						TCM (µg/L)	CCI ₄ (µg/L)	TCE (µg/L)	TCM (ppmv)	CCI ₄ (ppmv)	TCE (ppmv)
Field Blank	B1PMC7	N/A	N/A	09/19/2007 10/03/07	8:55	<2.0	<2.0	<2.0			
Post Tank T-02-01	B1PMC8	N/A	N/A	09/19/2007 10/03/07	8:57	<2.0	<2.0	<2.0			
Post Valve V-01-01	B1PMC9	N/A	N/A	09/19/2007 10/03/07	9:02	<2.0	<2.0	<2.0			
Post Tank T-01-01	B1PMD0	N/A	N/A	09/19/2007 10/03/07	9:14	11	1300	4.7			
Extraction Well #1	B1PMD1	299-W15-45	280.6	09/19/2007 10/03/07	9:18	6.3	850	<2.0			
Extraction Well #2	B1PMD2	299-W15-34	258.51	09/19/2007 10/03/07	9:19	15	2100	4			
Extraction Well #3	B1PMD3	299-W15-35	249.4	09/19/2007 10/03/07	10:28	12	1700	5.8			
Extraction Well #4	B1PMD4	299-W15-47	278	09/19/2007 10/03/07	10:30	12	880	3.6			
Extraction Well #5	B1PMD5	299-W15-36	254.45	09/19/2007 10/03/07	10:38	11	340	<2.0			
Extraction Well #6	B1PMD6	299-W15-36	254.45	09/19/2007 10/03/07	10:42	13	1500	7			
Extraction Well #6 Duplicate	B1PMD7	299-W15-6	390	09/19/2007 10/03/07	10:42	13	1500	6.9			
Extraction Well #7	B1PMD8	299-W15-40	390	09/19/2007 10/03/07	9:23	16	2100	11			
Extraction Well #8	B1PMD9	299-W15-43	250.22	09/19/2007 10/03/07	9:24	9.4	1200	2.9			
Extraction Well #9	B1PMF0	299-W15-44	258.15	09/19/2007 10/03/07	9:26	14	2100	12			
Extraction Well #10	B1PMF1	299-W15-765	251.97	09/19/2007 10/03/07	9:28	15	1900	9.8			
Stack Effluent (Z-A3-01)	B1PMF2	N/A	N/A	09/19/07	① 08:31		B&K 1302		<1.0	<1.0	Not Analyzed
Post Chiller Air (Z-A2-01)	B1PMF3	N/A	N/A	09/19/07	② 08:35		B&K 1302		<1.0	8.62	Not Analyzed

① 08:38 MAB 12/31/07
 ② 08:45 MAB 12/31/07

000000002

200-ZP-1 monthly

D. TODAK / 65

MO-612 Field GC Daily Activity Log
(Logbook HNF-N-292 2, SAFs F02-001/F02-002)
Date: 10/03/07

0805	D. Todak arrived on-site at MO-612 laboratory trailer located at 200-ZP-1 to perform analysis of monthly 200-ZP-1 pump and treat samples. HP 6890N gas chromatograph S/N US10437002 and HP G1888 headspace autosampler S/N IT00430023 remain on and warmed up after unsuccessful attempt to analyze samples on 10/2/07. Loaded method HSECFID.M.
0805	Split / splitless inlet vent = 41.6 mL/min. Septum purge vent = 2.34 mL/min.
0812	Created sample sequence "Z071003.S".
0815	Prepared calibration standards of 5, 100, 200, 2000, 4000, and 8000 µg/L.
0834	Started sequence. ECD signal = 217.2.
0907	Started calibration of HP 6890N gas chromatograph. Trace quantities (4 µg/L) of PCE in second blank disregarded as it is not an analyte of interest in this run. Similar excess PCE detected in 5 µg/L calibration standard. Cause believed to be residue from inadvertent run triggered by WSCF personnel on 10/2/07 during inspection and survey for property transfer. Issue appears resolved in 100 µg/L calibration standard, calibration curves appear normal, and blank immediately prior to 100 µg/L LCS showed <2.0 µg/L PCE.
0951	Prepared 100 µg/L LCS calibration check standard.
1002	Completed calibration.
1012	D. Todak started preparing water samples for analysis. Note that all samples were contained in clear glass vials rather than the usual amber glass.
1035	100 µg/L calibration check: DCM = 100.4(100%), TCM = 100.5(100%), CCl ₄ = 98.8(99%), TCE = 97.3(97%), PCE = 88.7 (89%). Acceptable recoveries.
1100	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.
1107	Started analysis of water samples.
1140	Matrix spike recovery for V1-02MS = 85%
1151	Matrix spike duplicate recovery for V1-03MSD = 88%. Relative Percent Difference (RPD) = 3.4%. Noted low recoveries on PCE (63% MS, 41% MSD), potentially indicating it remains out of calibration at low concentrations.
1330	Prepared 3000 µg/L calibration check standard.
1402	Completed analysis of process water samples.
1424	3000 µg/L calibration check: DCM = 3053 (102%), TCM = 3026 (101%), CCl ₄ = 3022 (101%), TCE = 3021 (101%), PCE = 2956 (99%). Acceptable recoveries.
1500	Sequence run completed. Saved sequence "Z071003.S". Saved method HSECFID.M with annotation "ZP-1 Monthly - 10-03-07".
1505	Disposed of liquid and solid waste.
1510	Turned off inside hydrogen and breathing air supply valves. Turned off outside hydrogen and breathing air gas bottle valves.
1515	Loaded standby method, shut down computer equipment, and left trailer

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

D. TODAK

OCT 31 2007

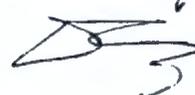


Reviewed by: *Madhusen*
Madhusen 10/17/07

00000003

200-ZP-1 monthly

D. TODAK / 65



MOBILE LABORATORY DATA/LOG SHEET (Logbook HNF-N-293 1, SAF F02-001/F02-002)
 Site Name: 200-ZP-1 Phase III (Monthly/Quarterly) Analyzed: 10-03-07

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	----	0820	Water	DT	1024	<2.0	<2.0	<2.0	hs010.d
100µg/L Cal. Check	----	0951	Water	DT	1035	100.5 100%	98.8 99%	97.3 97%	hs011.d; Acceptable recoveries.
DI Blank	----	0820	Water	DT	1046	<2.0	<2.0	<2.0	hs012.d
Field Blank	B1PMC7	0855*	Water	DEP/DPC	1107	<2.0	<2.0	<2.0	hs014.d
Z-T2-01	B1PMC8	0857*	Water	DEP/DPC	1118	<2.0	<2.0	<2.0	hs015.d
Z-V1-01	B1PMC9	0902*	Water	DEP/DPC	1129	<2.0	<2.0	<2.0	hs016.d
Z-V1-02 MS	----	0902*	Water	DEP/DPC	1140	9.59 96%	8.48 85%	8.66 87%	hs017.d
Z-V1-03 MSD	----	0902*	Water	DEP/DPC	1151	10.21 102%	8.77 88%	8.96 90%	hs018.d; (RPD=3.4%)
Z-T1-01	B1PMD0	0914*	Water	DEP/DPC	1202	11	1300	4.7	hs019.d
Z-W1-01	B1PMD1	0918*	Water	DEP/DPC	1213	6.3	850	<2.0	hs020.d
Z-W2-01	B1PMD2	0919*	Water	DEP/DPC	1224	15	2100	4.0	hs021.d
Z-W3-01	B1PMD3	1028*	Water	DEP/DPC	1235	12	1700	5.8	hs022.d; Manifold Bldg. 1
Z-W4-01	B1PMD4	1030*	Water	DEP/DPC	1245	12	880	3.6	hs023.d; Manifold Bldg. 1
Z-W5-01	B1PMD5	1038*	Water	DEP/DPC	1256	11	340	<2.0	hs024.d; Manifold Bldg. 2
Z-W6-01	B1PMD6	1042*	Water	DEP/DPC	1307	13	1500	7.0	hs025.d; Manifold Bldg. 2
Z-W6-02 Dupl.	B1PMD7	1042*	Water	DEP/DPC	1318	13	1500	6.9	hs026.d; Manifold Bldg. 2 (RPD=3.7%)
Z-W7-01	B1PMD8	0923*	Water	DEP/DPC	1329	16	2100	11	hs027.d
Z-W8-01	B1PMD9	0924*	Water	DEP/DPC	1340	9.4	1200	2.9	hs028.d
Z-W9-01	B1PMF0	0926*	Water	DEP/DPC	1351	14	2100	12	hs029.d
Z-W10-01	B1PMF1	0928*	Water	DEP/DPC	1402	15	1900	9.8	hs030.d
DI Blank	----	0820	Water	DT	1413	<2.0	<2.0	<2.0	hs031.d
3000µg/L Cal. Check	----	1330	Water	DT	1424	3026 101%	3022 101%	3021 101%	hs032.d; Acceptable recoveries.
DI Blank	----	0820	Water	DT	1434	<2.0	<2.0	<2.0	hs033.d
Blank	----	----	Air	DJA	1025*	<2.0	<2.0	NA	B&K 1302
25.37 ppm Cal. Check	----	----	Air	DJA	1029*	NA	22.1 87%	NA	B&K 1302 Acceptable recovery.
Z-A3-01	B1PMF2	0838*	Air	DEP/DPC	1031*	<2.0	<2.0	NA	B&K 1302
Z-A2-01	B1PMF3	0845*	Air	DEP/DPC	1035*	<2.0	8.62	NA	B&K 1302
25.37 ppm Cal. Check	----	----	Air	DJA	1043*	NA	22.1 87%	NA	B&K 1302 Acceptable recovery.
Blank	----	----	Air	DJA	1045*	<2.0	<2.0	NA	B&K 1302

* Times with asterisks are from 09-19-07 sampling and analysis. All other dates are either noted or are from second date of analysis - 10-03-07. Data recorded in real-time on GC computer in MO-612. For instrument operation information, please refer to logbook HNF-N-292-2, page .

D. TODAK

10/31/07

D. TODAK

10/31/07

Reviewed by: M. Johnson / M. Johnson 10/17/07

00000004

200-ZP-1 Monthly

D.TODAK / GS 

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

Date: 9/19/07

0853	Vapor samples B1PMF2 (AS-3) and B1PMF3 (AS-2) delivered by DE Parchen, received by Trailer MO-612. <i>DS Alexander</i>
0900	Dave 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.
0905	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.
1022	Placed instrument into automatic sampling mode (ambient air).
1025	Analyzed blank air sample: TCM = <1.0 ppm, CCl ₄ = <1.0 ppm, TCE = NAF.
1029	Analyzed 25.37 ppm calibration standard. CCl ₄ = 22.1 ppm (87%). Acceptable recovery.
1031	Started analysis of 200-ZP-1 samples.
1045	Completed analysis of 200-ZP-1 samples.
1050	Turned instrument off.

D.TODAK

OCT 3 1 2007



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

D.TODAK

OCT 3 1 2007

Reviewed by: *Mechansen/*
Mechansen
9/17/07

COLLECTOR

NCO Samplers

Fluor Hanford
D. E. PARCHEN

COMPANY CONTACT

BYRNES, ME

TELEPHONE NO.

373-3996

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

ICE CHEST NO.

FIELD LOGBOOK NO.

HNF-N-575-2

COA

122598ES10

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

HCl to pH <2/Cool--4C

TYPE OF CONTAINER

Gs*

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
B1PMC7	WATER	9-19-07	0855 ✓
B1PMC8	WATER		0857 ✓
B1PMC9	WATER		0902 ✓
B1PMD0	WATER		0914 ✓
B1PMD1	WATER		0910 ✓

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Fluor Hanford D. E. PARCHEN	9-19-07	MCG12 Ref	9-19-7 1053
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

90000000

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME

FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME
	Returned to Project	D. TODAK	10/31/07 1505

COLLECTOR
NCO Samplers

Fluor Hanford
D. E. PARCHEN

COMPANY CONTACT
BYRNES, ME

TELEPHONE NO.
373-3996

PROJECT COORDINATOR
TRENT, SJ

PRICE CODE FIELD

DATA
TURNAROUND

SAMPLING LOCATION
200-ZP-1

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

SAF NO.
F02-001

AIR QUALITY

0 Days / 0
Days

ICE CHEST NO.

FIELD LOGBOOK NO. COA
HNF-N-575-2 122598E510

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 HCl to pH <2/Cool~4C

TYPE OF CONTAINER Gs*

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	
B1PMD2	WATER	9-19-07	0919	✓
B1PMD3	WATER		1028	✓
B1PMD4	WATER		1030	✓
B1PMD5	WATER		1038	✓
B1PMD6	WATER		1042	✓

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
D. E. PARCHEN	9-19-07 1053	M. G. 12 REF	9-19-07 1053
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

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

00000007

LABORATORY SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

Return to Project

DISPOSED BY

D. TODAK

DATE/TIME

10/31/07 1505

