

Mission Support Alliance
P.O. Box 650
Richland, Washington 99352



M4W41-SLF-09-233

September 8, 2009

Mr. M. A. Neely, Manager
Analytical Services
CH2M HILL Plateau Remediation Contract
PO Box 1600 MSIN R3-60
Richland, WA 99352

Dear Mike,

FINAL RESULTS FOR SAMPLE DELIVERY GROUP WSCF20090842 – SAF NUMBER F09-034

- Reference(s):
- 1) Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, 'FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER'
 - 2) HNF-SD-CD-QAPP-017, Rev. 9, Waste Sampling & Characterization Facility Quality Assurance Plan

This letter contains the following attachments for sample delivery group WSCF20090842:

- Cover Sheet (Attachment 1)
- Narrative (Attachment 2)
- Analytical Results (Attachment 3)
- Sample Receipt Information (Attachment 4)

Very truly yours,

A handwritten signature in black ink, appearing to read "S. L. Fitzgerald", written over a horizontal line.

S. L. Fitzgerald
WSCF Analytical Lab

SLF/grf
Attachments 4

cc: w/Attachments
A. J. Kopriva S3-30
H. K. Meznarich S3-30
J. E. Trechter S3-30
S. J. Trent R3-50
File/LB

M4W41-SLF-09-233

ATTACHMENT 1

COVER SHEET

Consisting of 2 pages
Including cover page

WSCF SAF NUMBER CROSS REFERENCE

Group#: WSCF20090842
Data Deliverable Date: 03-sep-2009
Data Deliverable: Cover Sheet

SAF#	Sample ID	WSCF#	Matrix
F09-034	B20YC2	W09GR00665	SOIL
	B20YK4	W09GR00666	SOIL

M4W41-SLF-09-233

ATTACHMENT 2

NARRATIVE

Consisting of 3 pages
Including cover page

Introduction

Two (2) S&GRP samples were received at the WSCF Laboratory on August 27, 2009. Samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, "FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER."*

The narrative (Attachment 2) will address sample characteristics, analyses requested and general information in performance of the analytical methods. A Data Summary Report (Attachment 3) includes analytical results, a comment report detailing method abnormalities, tentatively identified peaks if applicable, method references, and Laboratory QC information as applicable. Copies of the chain of custody and sample receipt documentation are included as Attachment 4.

It should be noted that the attached chain of custody was NOT stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving.

The following generic data qualifiers (i.e., B, D, and J) may be applicable to this report, as appropriate

- **B** – Sample results with a concentration greater than the MDL but less than the PQL are B flagged (applies to inorganic and wetchem analyses), as appropriate.
- **D** – Sample results are D flagged if dilution(s) were required, as appropriate.
- **J** – Sample results with a concentration greater than the MDL but less than the PQL are J flagged (applies to organic analyses), as appropriate.

Analytical Methodology for Requested Analyses

Refer to *WSCF Method References Report*, pages 11 through 12, for a complete listing of approved analytical methods.

Inorganic Comments

Hexavalent Chromium – The hold time requirement for this analysis was met. A Duplicate, Matrix Spike, Blank and Laboratory Control Sample were analyzed with this delivery group. See page 15 for QC details. Analytical Note(s):

All QC controls are within the established limits.

ICP-MS Metals – The hold time requirements for this analysis were met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. See page 16 for QC details. Analytical Note(s):

- Batch QC analyzed on sample# B21N94

- Lead – Matrix Spike and Matrix Spike Duplicate recoveries did not meet the laboratory established limit of 70% at 47.1% and 51.8% respectively. Affected sample results in this batch were N flagged.

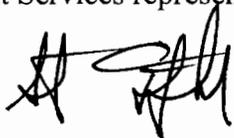
All other QC controls are within the established limits.

Organic Comments

PCB – All results are moisture corrected and reported on a dry weight basis. The hold time requirements for this analysis were met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. See pages 20 through 21 for QC details. Analytical Note(s):

All QC controls are within the established limits.

We certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this data package has been authorized by the Analytical Laboratory Manager (or designee) and the Client Services representative as verified by the following signatures.



Scot L. Fitzgerald
WSCF Analytical Laboratory Manager



Andrew J. Kopriva
WSCF Client Services

M4W41-SLF-09-233

ATTACHMENT 3

ANALYTICAL RESULTS

Consisting of 16 pages
Including cover page

WSCF
ANALYTICAL RESULTS REPORT

for
Groundwater Remediation Program

Richland, WA 99354

Attention: Steve Trent

Analytical: *[Signature]* S. Fitzgerald 9-7-09
Client Services: *[Signature]* A. Kopriva 9-8-09

All results are reported on an "as received" basis unless otherwise noted in the comment section.

This information is intended for the use of the addressee only. If the reader of this report is not the intended recipient or is not authorized by the recipient to receive the report, you are hereby notified that any dissemination, distribution or copying of this report is strictly prohibited. If you have received this report in error, please notify WSCF Laboratory immediately by telephone at (509) 373-7020 or (509) 531-8004. Information designation of this report is the responsibility of the customer.

Contract#: M0A-FH-CHPRC-2008
Report#: WSCF20090842
Report Date: 8-sep-2009
Report WGPP/ver. 5.2
Groundwater Remediation Program

W13q Worklist/Batch/QC Report for Group# WSCF20090842

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
			44893	BLANK		PCBs complete list
			44893	LCS		PCBs complete list
			44893	SAMPLE	W09GR00665	PCBs complete list
			44893	SURR	W09GR00665	PCBs complete list
			44893	MS	W09GR00666	PCBs complete list
			44893	MSD	W09GR00666	PCBs complete list
			44893	SAMPLE	W09GR00666	PCBs complete list
			44893	SPK-RPD	W09GR00666	PCBs complete list
			44893	SURR	W09GR00666	PCBs complete list

Department: Inorganic

W13q Worklist/Batch/QC Report for Group# WSCF20090842

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
				SAMPLE	W09GR00665	Percent Solids
				SAMPLE	W09GR00666	Percent Solids
39903	2	40332	44889	BLNK-PREP		Hexavalent chromium
39903	3	40332	44889	LCS		Hexavalent chromium
39903	5	40332	44889	DUP	W09GR00552	Hexavalent chromium
39903	6	40332	44889	MS	W09GR00552	Hexavalent chromium
39903	7	40332	44889	MSD	W09GR00552	Hexavalent chromium
39903	9	40332	44889	SPK-POST	W09GR00552	Hexavalent chromium
39903	7	40332	44889	SPK-RPD	W09GR00552	Hexavalent chromium
39903	16	40332	44889	SAMPLE	W09GR00665	Hexavalent chromium
39903	17	40332	44889	SAMPLE	W09GR00666	Hexavalent chromium
39904	1	40333	44890	BLANK		ICP-200.8 MS All possible meta
39904	2	40333	44890	LCS		ICP-200.8 MS All possible meta
39904	7	40333	44890	MS	W09GR00564	ICP-200.8 MS All possible meta
39904	8	40333	44890	MSD	W09GR00564	ICP-200.8 MS All possible meta
39904	8	40333	44890	SPK-RPD	W09GR00564	ICP-200.8 MS All possible meta
39904	12	40333	44890	SAMPLE	W09GR00665	ICP-200.8 MS All possible meta
39904	13	40333	44890	SAMPLE	W09GR00666	ICP-200.8 MS All possible meta

WSCF METHOD REFERENCES REPORT

Department: Inorganic

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory or industry methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-265-403	LA-265-403: Hexavalent Chromium analysis by Spectrophotometer EPA SW-846 7196A HEIS 7196_CR6 HEXAVALENT CHROMIUM Hexavalent Chromium
LA-505-412	LA-505-412: DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY EPA-600/R-94-111 200.8 HEIS 200.8 METALS_ICPMS HEIS RADISOTOPES_ICPMS DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY COUPLED PLAS Inductively Coupled Plasma - Mass Spectrometry Radioisotopes by ICP/MS
LA-519-412	LA-519-412: TOTAL RESIDUE/% SOLIDS DRIED AT 103 - 105 C EPA-600/4-79-020 160.1 EPA-600/4-79-020 160.3 HEIS 160.1 TDS Standard Methods 2540B Residual, Filterable RESIDUE, TOTAL Residual, Filterable Total Solids Dried at 103-105 C

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at <http://www2.rl.gov/phmc/as-dol>.

Report Date: 8-sep-2009
Report#: WSCF20090842
Report WGPPI/5.2

WSCF METHOD REFERENCES REPORT

Department: Organic

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory or industry methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-523-427	LA-523-427: POLYCHLORINATED BIPHENYLS (PCBs) BY GAS CHROMATOGRAPHY
EPA SW-846 3510C	SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION
EPA SW-846 3545	PRESSURIZED FLUID EXTRACTION (PFE)
EPA SW-846 3665A	SULFURIC ACID/PERMANGANATE CLEANUP
EPA SW-846 8000B	DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS
EPA SW-846 8082A	POLYCHLORINATED BIPHENYLS (PCBs) BY GAS CHROMATOGRAPHY
HEIS 8082_PCB_GC	Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at <http://www2.rl.gov/phmc/as-dol>.

Report Date: 8-sep-2009
Report#: WSCF20090842
Report WGPPM/5.2

WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent **Group #:** WSCF20090842
SAF Number: F09-034 **Department:** Inorganic
Sample # W09GR00665 **Sampled:** 08/12/09
Client ID: B20YC2 **Received:** 08/27/09

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Hexavalent Chromium Prep											
Hexavalent Chromium	18540-29-9	LA-265-403	U	< 0.300	mg/kg			1.00	0.30		09/02/09
ICP-200.8 MS All possible meta Prep											
ICP-200.8 MS All possible meta	7439-92-1	LA-505-412	N	2.49	mg/kg			0.85	0.0851		09/02/09
Lead	7439-97-6	LA-505-412	U	< 0.0426	mg/kg			0.85	0.0426		09/01/09
Mercury											
Total solids											
Total solids	TS	LA-519-412		91.6	Percent			1.00	0.0		09/02/09

MDL = Minimum Detection Limit N - Spike sample recovery is outside control limits.(inorg)
RQ = Result Qualifier U - Analyzed for but not detected above limiting criteria.(org)
TP Err = Total Propagated Error
DF = Dilution Factor

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols
 Report *WGPP/ver. 5.2*
 Groundwater Remediation Program

WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F09-034
Sample # W09GR00666
Client ID: B20YK4

GPP TRENT
WSCF

Group #: WSCF20090842
Department: Inorganic
Sampled: 08/12/09
Received: 08/27/09

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
----------------	-------	--------	----	--------	------	--------	------	----	-----	-----	---------------

Hexavalent Chromium Prep

Hexavalent Chromium

Hexavalent Chromium

18540-29-9

LA-265-403

U

< 0.300

mg/kg

1.00

0.30

09/02/09

ICP-200.8 MS All possible meta Prep

ICP-200.8 MS All possible meta

Lead

7439-92-1

LA-505-412

N

1.51

mg/kg

0.96

0.0961

09/02/09

Mercury

7439-97-6

LA-505-412

U

< 0.0481

mg/kg

0.96

0.0481

09/02/09

Total solids

Total solids

TS

LA-519-412

94.9

Percent

1.00

0.0

09/01/09

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.(org)

U - Analyzed for but not detected above limiting criteria.(inorg)

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20090842
 Matrix: SOLID
 Test: Hexavalent chromium

Sample Date: 08/07/09
 Receive Date: 08/07/09

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W09GR00552											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Hexavalent chromium	18540-29-9	< 0.30		RPD			n/a	15.000	U	09/02/09
MS	Hexavalent chromium	18540-29-9	285	85.075	% Recov	75.000	125.000				09/02/09
MS	Hexavalent chromium	18540-29-9	36.7	84.368	% Recov	75.000	125.000				09/02/09
MSD	Hexavalent chromium	18540-29-9	39.0	85.339	% Recov	75.000	125.000				09/02/09
SPK-POST	Hexavalent chromium	18540-29-9	0.0522	97.753	% Recov	75.000	125.000				09/02/09
SPK-RPD	Hexavalent chromium	18540-29-9	85.339		RPD			1.144	20.000		09/02/09
BATCH QC											
BLNK-PREP	Hexavalent chromium	18540-29-9	< 0.30	n/a	ug/g	0.000	2.000			U	09/02/09
LCS	Hexavalent chromium	18540-29-9	18.6	93.000	% Recov	80.000	120.000				09/02/09

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20090842

Matrix: SOLID

Test: ICP-200.8 MS All possible meta

Sample Date: 08/20/09

Receive Date: 08/20/09

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD (%)	RPD Limit	RQ	Analysis Date	
Lab ID: W09GR00564												
BATCH QC ASSOCIATED WITH SAMPLE												
MS	Mercury	7439-97-6	0.89	89.000	% Recov	70.000	130.000				09/02/09	
MS	Lead	7439-92-1	47.11	47.110	% Recov	70.000	130.000		*		09/02/09	
MSD	Mercury	7439-97-6	1.05	105.000	% Recov	70.000	130.000				09/02/09	
MSD	Lead	7439-92-1	51.76	51.760	% Recov	70.000	130.000		*		09/02/09	
SPK-RPD	Mercury	7439-97-6	105.000		RPD			16.495	20.000		09/02/09	
SPK-RPD	Lead	7439-92-1	51.760		RPD			9.406	20.000		09/02/09	
BATCH QC												
BLANK	Mercury	7439-97-6	<5e-2	n/a	ug/L					U	09/02/09	
BLANK	Lead	7439-92-1	<0.1	n/a	ug/L					U	09/02/09	
LCS	Mercury	7439-97-6	8.25	99.638	% Recov	72.000	117.000				09/02/09	
LCS	Lead	7439-92-1	143.9	110.692	% Recov	77.000	125.000				09/02/09	

WSCF ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F09-034

Group #: WSCF20090842
Department: Inorganic

Sample #	Client ID	Lab Area	Test	Comment
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VALGROUP

PCB: All results are moisture corrected and reported on a weight. cgc

ICP-MS: Lead spike recovery 47%. "N" Flag

Lab Areas: VALGROUP - Group Validation
LOGSAMP - Login for Sample

VALTEST - Test Validation
LOGTEST - Login for Tests

TESTDATA - Test Data Entry

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wgppc/5.2 Report#: WSCF20090842 Report Date: 8-sep-2009

Page 2

WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent **Group #:** WSCF20090842
SAF Number: F09-034 **Department:** Organic
Sample #: W09GR00665 **Sampled:** 08/12/09
Client ID: B20YC2 **Received:** 08/27/09

GPP **TRENT** **Matrix:** SOIL
WSCF

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
PCBs complete list Prep											
PCBs complete list											
Aroclor-1016	12674-11-2	LA-523-427	U	< 17.0	ug/kg			1.00	17		09/02/09
Aroclor-1221	11104-28-2	LA-523-427	U	< 35.0	ug/kg			1.00	35		09/02/09
Aroclor-1232	11141-16-5	LA-523-427	U	< 17.0	ug/kg			1.00	17		09/02/09
Aroclor-1242	53469-21-9	LA-523-427	U	< 17.0	ug/kg			1.00	17		09/02/09
Aroclor-1248	12672-29-6	LA-523-427	U	< 17.0	ug/kg			1.00	17		09/02/09
Aroclor-1254	11097-69-1	LA-523-427	U	< 17.0	ug/kg			1.00	17		09/02/09
Aroclor-1260	11096-82-5	LA-523-427	U	< 17.0	ug/kg			1.00	17		09/02/09
Aroclor-1262	37324-23-5	LA-523-427	U	< 17.0	ug/kg			1.00	17		09/02/09
Aroclor-1268	11100-14-4	LA-523-427	U	< 17.0	ug/kg			1.00	17		09/02/09

MDL = Minimum Detection Limit N - Spike sample recovery is outside control limits. (inorg)
RQ = Result Qualifier U - Analyzed for but not detected above limiting criteria. (org)
TP Err = Total Propagated Error
DF = Dilution Factor

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols
 Report WGPP/ver. 5.2

Groundwater Remediation Program

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20090842
 Matrix: SOLID
 Test: PCBs complete list

Sample Date: 08/12/09
 Receive Date: 08/27/09

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date	
Lab ID: W09GR00665												
BATCH QC ASSOCIATED WITH SAMPLE												
SURR	Decachlorobiphenyl	2051-24-3	348.26	101.000	% Recov	50.000	150.000				09/02/09	
SURR	Tetrachloro-m-xylene	877-09-8	324.32	94.000	% Recov	50.000	150.000				09/02/09	
Lab ID: W09GR00666												
BATCH QC ASSOCIATED WITH SAMPLE												
MS	Aroclor-1260	11096-82-5	160.56	87.000	% Recov	75.000	125.000				09/02/09	
MS	Decachlorobiphenyl	2051-24-3	166.20	90.100	% Recov	50.000	150.000				09/02/09	
MS	Tetrachloro-m-xylene	877-09-8	150.75	81.700	% Recov	50.000	150.000				09/02/09	
MSD	Aroclor-1260	11096-82-5	198.99	96.600	% Recov	75.000	125.000				09/02/09	
MSD	Decachlorobiphenyl	2051-24-3	208.32	101.000	% Recov	50.000	150.000				09/02/09	
MSD	Tetrachloro-m-xylene	877-09-8	186.79	90.700	% Recov	50.000	150.000				09/02/09	
SPK-RPD	Aroclor-1260	11096-82-5	96.600		RPD			10.458	25.000		09/02/09	
SPK-RPD	Decachlorobiphenyl	2051-24-3	101.000		RPD			11.408	20.000		09/02/09	
SPK-RPD	Tetrachloro-m-xylene	877-09-8	90.700		RPD			10.441	20.000		09/02/09	
SURR	Decachlorobiphenyl	2051-24-3	179.86	90.700	% Recov	50.000	150.000				09/02/09	
SURR	Tetrachloro-m-xylene	877-09-8	181.31	91.400	% Recov	50.000	150.000				09/02/09	
BATCH QC												
BLANK	Aroclor-1016	12674-11-2	< 2.0	n/a	UGKG					U	09/02/09	
BLANK	Aroclor-1221	11104-28-2	< 4.0	n/a	ug/Kg					U	09/02/09	
BLANK	Aroclor-1232	11141-16-5	< 2.0	n/a	ug/Kg					U	09/02/09	
BLANK	Aroclor-1242	53469-21-9	< 2.0	n/a	ug/Kg					U	09/02/09	
BLANK	Aroclor-1248	12672-29-6	< 2.0	n/a	ug/Kg					U	09/02/09	
BLANK	Aroclor-1254	11097-69-1	< 2.0	n/a	ug/Kg					U	09/02/09	
BLANK	Aroclor-1260	11096-82-5	< 2.0	n/a	ug/Kg					U	09/02/09	
BLANK	Aroclor-1262	37324-23-5	< 2.0	n/a	ug/Kg					U	09/02/09	

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20090842
 Matrix: SOLID
 Test: PCBs complete list

Sample Date:
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BLANK	Aroclor-1268	11100-14-4	< 2.0	n/a	ug/Kg					U	09/02/09
BLANK	Decachlorobiphenyl	2051-24-3	35.472	88.700	% Recov	50.000	150.000				09/02/09
BLANK	Tetrachloro-m-xylene	877-09-8	32.221	80.600	% Recov	50.000	150.000				09/02/09
LCS	Aroclor-1260	11096-82-5	174.02	87.000	% Recov	70.000	130.000				09/02/09
LCS	Decachlorobiphenyl	2051-24-3	184.95	92.500	% Recov	50.000	150.000				09/02/09
LCS	Tetrachloro-m-xylene	877-09-8	191.25	95.600	% Recov	50.000	150.000				09/02/09

WSCF ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F09-034

Group #: WSCF20090842
Department: Organic

Sample #	Client ID	Lab Area	Test	Comment
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VALGROUP

PCB: All results are moisture corrected and reported on a weight. cgc

ICP-MS: Lead spike recovery 47%. "N" Flag

Lab Areas:	VALGROUP - Group Validation LOGSAMP - Login for Sample	VALTEST - Test Validation LOGTEST - Login for Tests	TESTDATA - Test Data Entry
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wgppc/5.2 Report#: WSCF20090842

Report Date: 8-sep-2009

Page 1

M4W41-SLF-09-233

ATTACHMENT 4

SAMPLE RECEIPT INFORMATION

Consisting of 4 pages
Including cover page

Waste Sampling and Characterization Facility
P.O. BOX 1970 S3-30, Richland, WA 99352
PHONE: (509) 373-7004/FAX: (509) 373-7134

File
✓
9/11/09

ACKNOWLEDGMENT OF SAMPLES RECEIVED

Groundwater Remediation Program

Richland, WA 99354
Attn: Steve Trent

Customer Code: GPP
PO#: 301411/ES10
Group#: 20090842
Project#: F09-034
Proj Mgr: STEVE TRENT
Phone: 373-5869

The following samples were received from you on 08/27/09. They have been scheduled for the tests listed beside each sample. If this information is incorrect, please contact your service representative. Thank you for using Waste Sampling and Characterization Facility.

Sample#	Sample Id	Tests Scheduled	Matrix	Sample Date
W09GR00665	B20YC2	GPP @2008	TRENT Solid, or handle as if solid @PCBGPP CR+6 PERSOLID	08/12/09
W09GR00666	B20YK4	GPP @2008	TRENT Solid, or handle as if solid @PCBGPP CR+6 PERSOLID	08/12/09

Test Acronym Description

Test Acronym	Description
@2008	ICP-200.8 MS All possible meta - <i>Pb & Cd</i>
@PCBGPP	PCBs complete list
CR+6	Hexavalent chromium
PERSOLID	Percent Solids

COLLECTOR

D. Seack
SAMPLING LOCATION

Composite; ZONE 6

ICE CHEST NO.

BWS-113

SHIPPED TO

Waste Sampling & Characterization

MATRIX*

- A=Air
- DL=Drum
- L=Liquids
- DS=Drum
- S=Solids
- 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 may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

RADIOACTIVE TIE TO: B20YB6

20090842

SAMPLE NO.

MATRIX*

B20YC2 *IN 0760615* SOIL

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM
D. Seack
DATE/TIME
8/12/09

RELINQUISHED BY/REMOVED FROM
M. G. 713
DATE/TIME
8/27/09

RELINQUISHED BY/REMOVED FROM
D. Archer
DATE/TIME
8/27/09

RELINQUISHED BY/REMOVED FROM
D. Archer
DATE/TIME
8/27/09

RELINQUISHED BY/REMOVED FROM
DATE/TIME

RELINQUISHED BY/REMOVED FROM
DATE/TIME

RELINQUISHED BY/REMOVED FROM
DATE/TIME

RELINQUISHED BY/REMOVED FROM
DATE/TIME

LABORATORY SECTION

RECEIVED BY
DISPOSAL METHOD

COMPANY CONTACT

WIDRIG, DL

PROJECT DESIGNATION

UPR-100-K-1 In-Process Sampling and Analysis

FIELD LOGBOOK NO.

WPR N-507-1

OFFSITE PROPERTY NO.

N/A

PRESERVATION

None

Cool-to-C

Cool-to-F

TYPE OF CONTAINER

G/P

G/P

aG

NO. OF CONTAINER(S)

1

1

1

VOLUME

120ml

60ml

250ml

SAMPLE ANALYSIS

SEE ITEM (1) IN SPECIAL INSTRUCTIONS
Chromium Hex - PCBs - 8082 (Arochlor 1254, Arochlor 1260)

SAMPLE DATE

8-18-09

SAMPLE TIME

1300

SIGN/PRINT NAMES

RECEIVED BY/STORED IN

M. G. 713

RECEIVED BY/STORED IN

D. Archer

RECEIVED BY/STORED IN

TA F. 121.151

DATE/TIME

8/12/09

DATE/TIME

8/27/09

DATE/TIME

8/27/09

DATE/TIME

8/27/09

DATE/TIME

8/27/09

DATE/TIME

8/27/09

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met. The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met. (1)ICP/MS - 200.8 (Add-on) {Lead} 200.8_HG - ICPMS {Mercury}

TITLE

DISPOSED BY

DATE/TIME

DATE/TIME

TELEPHONE NO.

376-2858

PROJECT COORDINATOR

WIDRIG, DL

SAF NO.

F09-034

METHOD OF SHIPMENT

GOVERNMENT VEHICLE

BILL OF LADING/AIR BILL NO.

N/A

ACTUAL SAMPLE DEPTH

1-2

PRICE CODE

88

AIR QUALITY

DATA

TURNAROUND

7 Days / 15 Days

COLLECTOR *Rosalee For Sparks*

COMPANY CONTACT WIDRIG, DL TELEPHONE NO. 376-2858 PROJECT COORDINATOR WIDRIG, DL

PRICE CODE 88 DATA TURNAROUND 7 Days / 15 Days AIR QUALITY METHOD OF SHIPMENT GOVERNMENT VEHICLE

SAMPLING LOCATION Discrete; (DEEP) ZONE 4

PROJECT DESIGNATION UPR-100-K-1 In-Process Sampling and Analysis

SAF NO. F09-034

ICE CHEST NO. *OWS-113*

FIELD LOGBOOK NO. *HNF-N-507-7* ACTUAL SAMPLE DEPTH *8-9'* COA 301411ES10

BILL OF LADING/AIR BILL NO. N/A

OFFSITE PROPERTY NO. N/A

Waste Sampling & Characterization

MATRIX* POSSIBLE SAMPLE HAZARDS/ REMARKS A=Air Contains Radioactive Material at concentrations that may or may not be regulated for transport per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) DL= Drum L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other

PRESERVATION None Cool-to-C Cool-to-C TYPE OF CONTAINER G/P G/P NO. OF CONTAINER(S) 1 1 VOLUME 120mL 60mL 250mL

SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE TIE TO: B20YC6

SEE ITEM (1) IN Chromium Hex. PCBs - 8082 SPECIAL (Anclor-1254, Anclor-1260) INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B20YK4 107600666 SOIL		8-12-09	1115

JAR 8-12-09

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM *Larry Rosalee* DATE/TIME *8-12-09* RECEIVED BY/STORED IN *MD 413* DATE/TIME *8-27-09*

RELINQUISHED BY/REMOVED FROM *MD 413* DATE/TIME *8-27-09* RECEIVED BY/STORED IN *D. Parker* DATE/TIME *8-27-09*

RELINQUISHED BY/REMOVED FROM *D. Parker* DATE/TIME *8-27-09* RECEIVED BY/STORED IN *TA FORTZIEK* DATE/TIME *8/27/09 0810*

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 DISPOSAL METHOD _____ DISPOSED BY _____ DATE/TIME _____

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. ** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met. ** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing if/when this requirement can not be met. (1)ICP/MS - 200.8 (Add-on) (Lead) 200.8_HG - ICPMS (Mercury)