0093961

WSCF Laboratory

PO Box 650 S3-30
Richland, WA 99352

RECEIVED NOVEMBER 07, 2010 REVISION 1

November 5, 2010

Michael Neely
CH2M-HILL PRC
PO Box 1600
Richland, WA 99352

Dear Michael Neely,

REVISED90686 - 345798 [Report ID: 90686]

Reference: (1) SOW, Mod 2, #36587, Release 3
(2) HNF-SD-CD-QAPP-017, current version, Waste Sampling & Characterization Facility Quality Assurance Plan

This letter contains the following information for sample delivery group WSCF90686

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

Very truly yours,

Electronically signed by Joseph Hale
For Lab Manager
WSCF Analytical Lab
(509) 373-7495

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JAN 27 2011
EDMC

Attachments 4

CC: w/Attachments

File/LB

ATTACHMENT 1

COVER SHEET

Consisting of 2 pages
Including cover page

WSCF SAF Number Cross Reference

Group # WSCF90686
Data Deliverable Date 07/15/09

SAF #	Sample ID	Sample #	Matrix	Sampled	Received
F09-039	B212F4	90686001	WATER	06/30/09	06/30/09

ATTACHMENT 2

NARRATIVE

Consisting of 6 pages
Including cover page

Attachment 2
Narrative, Rev.1
WSCF90686

P&D Correction – Case Narrative Replaces The Prior Submittal in its Entirety

Introduction

One (1) S&GRP sample was received at the WSCF Laboratory on June 30, 2009. The sample was 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. Additionally, copies of the completed P&Ds # WSCF90686 and WSCF 90686b are included with this case narrative.

It should be noted that the attached chain of custody was stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving, indicating the presence of ice in the transport container.

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 for a complete listing of approved analytical methods.

Inorganic Comments

Anions – Hold time requirements (48 hours and 28 days) for this analysis were met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

All QC controls are within the established limits.

Attachment 2
Narrative. Rev.1
WSCF90686

ICP-AES Metals – The hold time requirements (28 days [Si and P] and 6 months) for this analysis were met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- Batch QC analyzed on sample# B212D6
    - Sodium – Sample concentration exceeded established laboratory limits by a factor of 4. Spike recoveries are not valid. High check standard was analyzed to ensure linearity for those sample results that were greater than the calibration standard.

All other QC controls are within the established limits.

ICP-MS Metals – The hold time requirements (28 days [Hg] and 6 months) for this analysis were met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

All QC controls are within the established limits.

Organic Comments

Semi-VOA – The hold time requirements (7/40 days or 14/40 days) for this analysis were met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- The matrix of the sample matrix spike interacted with the phenolic surrogates and some phenolic matrix spike compounds causing low recoveries for these compounds. This effect was not found in other samples, LCS or Blank confirming matrix effect of the sample spiked.

All other QC controls are within the established limits.

VOA – The hold time requirement (14 days) for this analysis was met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

All QC controls are within the established limits.

Radiochemistry Comments

Rad Chem – A Duplicate, Matrix Spike (Matrix Spikes apply only to Tritium), Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- Gamma Energy Analysis – Duplicate Relative Percent Difference(s) (RPD) exceeded established laboratory limits. The RPD criterion does not apply to results near or below the minimum detectable activity. No flags issued.

Attachment 2
Narrative. Rev.1
WSCF90686

- Gross Alpha/Gross Beta – Duplicate Relative Percent Difference(s) (RPD) exceeded established laboratory limits. The RPD criterion does not apply to results near or below the minimum detectable activity. No flags issued.

All other 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 electronic signatures shown on the WSCF ANALYTICAL RESULTS REPORT.

Attachment 2
Narrative, Rev.1
WSCF90686

Problem and Discrepancy Report

WSCF

SDG WSCF90686

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1. The data package has the following issues:

a) Page 48 is cutoff.

Resolution: *Provide complete pages.*

Lab Response: **The page has been corrected.**

b) Analytical results, inorganic, sample B212F4, Manganese high LCS recoveries should be discussed in the narrative.

Resolution: *Provide discussion.*

Lab Response: **The manganese LCS recoveries are NOT outside the limits. The narrative has been written correctly.**

Please correct the issues and resubmit the hard copy data package.

Attachment 2
Narrative, Rev.1
WSCF90686

3/1/2010

Problem and Discrepancy Report

WSCF

SDG WSCF90686b

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1. The data package has the following issues:

a) Sample B212F4 is missing silica, magnesium, and 1,2-dichloroethane from the EDD.

Resolution: *Provide data.*

Lab Response: **1,2-dichloroethane and magnesium were added. Manganese was removed from the 6010 list. Silicon (7440-21-3) was reported in lieu of silica (which WSCF is not able to report by 6010).**

5

ATTACHMENT 3

ANALYTICAL RESULTS

Consisting of 41 pages
Including cover page

WSCF ANALYTICAL RESULTS REPORT

For

CH2M Hill Plateau Remediation

PO Box 1600
Richland, WA 99352

Attention: Michael Neely

Contract #	MOA-FH-CHPRC-2008
Group #	WSCF90686
Report Date	November 5, 2010

Analytical: Electronically signed by Joseph Hale

Client Services: Electronically signed by Heather Medley

Solid samples results that have a 'Percent Solid' test are reported on a "dry weight basis", except results of TCLP, Percent Solid, and Total Activity. If no `Percent Solid' test is reported then the results are reported on an "as received" basis.

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.

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF90686

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
53877	53877	2	BLANK	10895	BLANK		Anions by Ion Chromatography (Water)
53877	53877	3	LCS	10896	LCS		Anions by Ion Chromatography (Water)
53877	53877	5	DUP	10897	B212F4(90686001DUP)	90686001	Anions by Ion Chromatography (Water)
53877	53877	6	MS	10898	B212F4(90686001MS)	90686001	Anions by Ion Chromatography (Water)
53877	53877	7	MSD	10899	B212F4(90686001MSD)	90686001	Anions by Ion Chromatography (Water)
53877	53877	12	SAMPLE	90686001	B212F4		Anions by Ion Chromatography (Water)
54064	54224	1	BLANK	11059	BLANK		ICP-6010 - All possible metals
54064	54224	2	LCS	11060	LCS		ICP-6010 - All possible metals
54064	54224	3	SAMPLE	90686001	B212F4		ICP-6010 - All possible metals
54064	54224	5	MS	11061	B212D6(90694002MS)	90694002	ICP-6010 - All possible metals
54064	54224	6	MSD	11062	B212D6(90694002MSD)	90694002	ICP-6010 - All possible metals

Batch QC List

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF90686

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
54040	54167	2	BLANK	11012	BLANK		SW-846 8270D Semivolatiles
54040	54167	3	LCS	11013	LCS		SW-846 8270D Semivolatiles
54040	54167	5	SAMPLE	90686001	B212F4		SW-846 8270D Semivolatiles
54040	54167	9	MS	11014	B212F2(90697002MS)	90697002	SW-846 8270D Semivolatiles
54040	54167	10	MSD	11015	B212F2(90697002MSD)	90697002	SW-846 8270D Semivolatiles

Batch QC List

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF90686

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
53858	53859	1	BLANK	10848	BLANK		SW-846 8260B Volatiles, separate prep
53858	53859	2	LCS	10849	LCS		SW-846 8260B Volatiles, separate prep
53858	53859	3	MS	10850	B1YMF3(90678001MS)	90678001	SW-846 8260B Volatiles, separate prep
53858	53859	4	MSD	10851	B1YMF3(90678001MSD)	90678001	SW-846 8260B Volatiles, separate prep
53858	53859	9	SAMPLE	90686001	B212F4		SW-846 8260B Volatiles, separate prep

Batch QC List

Attention Michael Neely
Department Radiochemistry

Group # WSCF90686

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
53886	53906	1	BLANK	10941	BLANK		Tritium by LSC
53886	53906	2	LCS	10942	LCS		Tritium by LSC
53886	53906	3	SAMPLE	90686001	B212F4		Tritium by LSC
53886	53906	4	DUP	10943	B20VV0(90688001DUP)	90688001	Tritium by LSC
53886	53906	5	MS	10944	B20VV0(90688001MS)	90688001	Tritium by LSC
54037	54038	1	BLANK	11010	BLANK		Technicium-99 by ICP MS
54037	54038	2	LCS	11011	LCS		Technicium-99 by ICP MS
54037	54038	3	SAMPLE	90686001	B212F4		Technicium-99 by ICP MS
54062	54133	1	BLANK	11052	BLANK		Gross Alpha/Gross Beta
54062	54133	2	LCS	11053	LCS		Gross Alpha/Gross Beta
54062	54133	3	SAMPLE	90686001	B212F4		Gross Alpha/Gross Beta
54062	54133	4	SAMPLE	90686001	B212F4		Gross Alpha/Gross Beta
54062	54133	5	DUP	11054	B212F4(90686001DUP)	90686001	Gross Alpha/Gross Beta
54118	54163	1	IBLANK	11167	IBLANK		Gamma Energy Analysis-general
54118	54163	2	LCS	11168	LCS		Gamma Energy Analysis-general
54118	54163	4	DUP	11169	B212D5(90694001DUP)	90694001	Gamma Energy Analysis-general
54118	54163	17	SAMPLE	90686001	B212F4		Gamma Energy Analysis-general

Method Reference

Attention Michael Neely
Department Inorganic

Group # WSCF90686

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, industry methods or HEIS 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 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-505-411	Elemental Analysis by ICP Atomic Emission Spectroscopy (ICP-AES)		
	EPA SW-846	6010C	Inductively Coupled Plasma-Atomic Emmision Spectrometry
	HEIS	6010_METALS_ICP	Inductively Coupled Plasma-Atomic Emmision Spectrometry
LA-533-410	Anion Analysis by Ion Chromatography		
	EPA-600/R-94-111	300.0	Determination of Inorganic Anions by Ion Chromatography
	HEIS	300.0_ANIONS_IC	Determination of Inorganic Anions by Ion Chromatography

Note: A complete list of WSCF analytical procedures and reference regulatory or industry methods is available online at http://www7.rl.gov/rapidweb/AS-DOL/index.cfm

Method Reference

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF90686

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, industry methods or HEIS 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 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-523-456	Semivolatile Sample Analysis by SW-846 Method 8270D		
	EPA SW-846	8000B	Determinative Chromagraphic Separations
	EPA SW-846	3510C	Separatory Funnel Liquid-Liquid Extraction
	EPA SW-846	8270D	Semivolatile Organic Compounds by Gas
	EPA SW-846	3545	Pressurized Fluid Extraction (PFE)
			Chromatography/Mass Spectrometry (GC/MS)
	HEIS	8270_SVOA_GCMS	Semivolatile Organic Compounds by Gas
			Chromatography/Mass Spectrometry(GC/MS)

Note: A complete list of WSCF analytical procedures and reference regulatory or industry methods is available online at http://www7.rl.gov/rapidweb/AS-DOL/index.cfm

Method Reference

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF90686

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, industry methods or HEIS 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 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-523-455	Volatile Sample Analysis by SW-846 Method 8260B		
	EPA SW-846	8000B	Determinative Chromographic Separations
	EPA SW-846	8260B	Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)
	HEIS	8260_VOA_GCMS	Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Note: A complete list of WSCF analytical procedures and reference regulatory or industry methods is available online at http://www7.rl.gov/rapidweb/AS-DOL/index.cfm

Method Reference

Attention Michael Neely
Department Radiochemistry

Group # WSCF90686

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, industry methods or HEIS 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 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-508-481	Gamma Energy Analysis using the Canberra Genie Ssystem		
	HEIS	GAMMA_GS	Gamma Energy Analysis
LA-508-421	Operation of the Tri-Carb Model 2500TR Liquid Scintillation Analyzer		
	HEIS	ALPHA_LSC	A/B Liquid Scintillation
	HEIS	BETA_LSC	A/B Liquid Scintillation
	HEIS	TC99_3MDSK_LSC	TC99 by Liquid Scintillation
	HEIS	TRITIUM_EIE_LSC	Tritium, by Eichrome ion exchange, LSC
LA-505-412	Technicium-99 by ICP-MS		
	HEIS	RADISOTOPES_ICPMS	Tc-99 by ICPMS
LA-508-415	Operation Of The Protean 2-Inch Alpha/Beta Counting System For Gross Alpha/ Beta Samples		
	HEIS	ALPHA_GPC	Gross Alpha by GPC
	HEIS	BETA_GPC	Gross Beta by GPC
	HEIS	SRTOT_SEP_PRECIP_GPC	Strontium beta isotopic, GPC

Note: A complete list of WSCF analytical procedures and reference regulatory or industry methods is available online at http://www7.rl.gov/rapidweb/AS-DOL/index.cfm

Attention Michael Neely
Department Inorganic

Group # WSCF90686

Sample # 90686001
SAF# F09-039
Sample ID B212F4

Matrix WATER
Sampled 06/30/09
Received 06/30/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**06/30/09**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	U	<0.030		ug/mL	1	0.030	0.20	06/30/09
Chloride	16887-00-6	LA-533-410		8.62		ug/mL	1	0.043	0.40	06/30/09
Nitrate-N	NO3-N	LA-533-410	B	0.0310		ug/mL	1	0.031	0.10	06/30/09
Sulfate	14808-79-8	LA-533-410	B	0.384		ug/mL	1	0.066	1.0	06/30/09
ICP Prep										**07/07/09**
ICP-AES										
Magnesium	7439-95-4	LA-505-411	B	46.2		ug/L	1	16	80	07/14/09
Sodium	7440-23-5	LA-505-411		412		ug/L	1	23	120	07/14/09
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	07/14/09
Chromium	7440-47-3	LA-505-411	U	<13		ug/L	1	13	65	07/14/09
Calcium	7440-70-2	LA-505-411		202		ug/L	1	39	200	07/14/09
Arsenic	7440-38-2	LA-505-411	U	<65		ug/L	1	65	320	07/14/09
Silicon	7440-21-3	LA-505-411	U	<61		ug/L	1	61	300	07/14/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

REVISED90686 -

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF90686

Sample # 90686001
SAF# F09-039
Sample ID B212F4

Matrix WATER
Sampled 06/30/09
Received 06/30/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
8270 Prep										**07/06/09**
SW-846 8270D										
4-Nitrophenol	100-02-7	LA-523-456	U	<0.6		ug/L	1	0.6	4	07/09/09
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	<0.9		ug/L	1	0.9	4	07/09/09
Phenol	108-95-2	LA-523-456	U	<0.9		ug/L	1	0.9	4	07/09/09
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	<0.7		ug/L	1	0.7	4	07/09/09
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
Pyrene	129-00-0	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
n-Nitroso-di-n-propylamine	621-64-7	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
Acenaphthene	83-32-9	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
Pentachlorophenol	87-86-5	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
2-Chlorophenol	95-57-8	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
4-Nitroaniline	100-01-6	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
4-Bromophenyl-phenylether	101-55-3	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
2,4-Dimethylphenol	105-67-9	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
4-Chloroaniline	106-47-8	LA-523-456	U	<0.6		ug/L	1	0.6	4	07/09/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE
D - Analyte was reported at a secondary diltution factor.
E - The calibration exceeds the calibration range (GC/MS).
J - Analyte < lowest calibration but >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

T - MS/MSD recovery outside control limits(GC/MS only).
U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

REVISED90686 -

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF90686

Sample # 90686001
SAF# F09-039
Sample ID B212F4

Matrix WATER
Sampled 06/30/09
Received 06/30/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Bis(1-Chloro-2-propyl)ether	108-60-1	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
Bis-(2-Chloroethyl) ether	111-44-4	LA-523-456	U	<0.6		ug/L	1	0.6	4	07/09/09
Bis-(2-Chloroethoxy)methane	111-91-1	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
Bis-(2-Ethylhexyl)phthalate	117-81-7	LA-523-456	J	1.7		ug/L	1	0.8	4	07/09/09
Di-n-octylphthalate	117-84-0	LA-523-456	U	<0.9		ug/L	1	0.9	4	07/09/09
Hexachlorobenzene	118-74-1	LA-523-456	U	<0.6		ug/L	1	0.6	4	07/09/09
Anthracene	120-12-7	LA-523-456	U	<0.6		ug/L	1	0.6	4	07/09/09
2,4-Dichlorophenol	120-83-2	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
Dimethylphthalate	131-11-3	LA-523-456	J	3.6		ug/L	1	0.5	4	07/09/09
Dibenzofuran	132-64-9	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
Benzo(g,h,i)perylene	191-24-2	LA-523-456	U	<0.7		ug/L	1	0.7	4	07/09/09
Indeno(1,2,3-cd)pyrene	193-39-5	LA-523-456	U	<0.7		ug/L	1	0.7	4	07/09/09
Benzo(b)fluoranthene	205-99-2	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
Fluoranthene	206-44-0	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
Benzo(k)fluoranthene	207-08-9	LA-523-456	U	<0.7		ug/L	1	0.7	4	07/09/09
Acenaphthylene	208-96-8	LA-523-456	U	<0.6		ug/L	1	0.6	4	07/09/09
Chrysene	218-01-9	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE
D - Analyte was reported at a secondary diltution factor.
E - The calibration exceeds the calibration range (GC/MS).
J - Analyte < lowest calibration but >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

T - MS/MSD recovery outside control limits(GC/MS only).
U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

REVISED90686 -

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF90686

Sample # 90686001
SAF# F09-039
Sample ID B212F4

Matrix WATER
Sampled 06/30/09
Received 06/30/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Benzo(a)pyrene	50-32-8	LA-523-456	U	<0.6		ug/L	1	0.6	4	07/09/09
2,4-Dinitrophenol	51-28-5	LA-523-456	U	<0.6		ug/L	1	0.6	4	07/09/09
Dibenzo(a,h)anthracene	53-70-3	LA-523-456	U	<0.6		ug/L	1	0.6	4	07/09/09
4,6-Dinitro-2-methylphenol	534-52-1	LA-523-456	U	<0.7		ug/L	1	0.7	4	07/09/09
1,3-Dichlorobenzene	541-73-1	LA-523-456	U	<1		ug/L	1	1	4	07/09/09
Benzo(a)anthracene	56-55-3	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
2,6-Dinitrotoluene	606-20-2	LA-523-456	U	<0.6		ug/L	1	0.6	4	07/09/09
4-Chlorophenyl-phenylether	7005-72-3	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
Hexachlorocyclopentadiene	77-47-4	LA-523-456	U	<0.8		ug/L	1	0.8	4	07/09/09
Isophorone	78-59-1	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
Diethyl phthalate	84-66-2	LA-523-456	U	<1		ug/L	1	1	4	07/09/09
Di-n-butylphthalate	84-74-2	LA-523-456	U	<1		ug/L	1	1	4	07/09/09
Phenanthrene	85-01-8	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
Butylbenzylphthalate	85-68-7	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
n-Nitrosodiphenylamine	86-30-6	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
Fluorene	86-73-7	LA-523-456	U	<0.6		ug/L	1	0.6	4	07/09/09

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T - MS/MSD recovery outside control limits(GC/MS only).
U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

REVISED90686 -

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF90686

Sample # 90686001
SAF# F09-039
Sample ID B212F4

Matrix WATER
Sampled 06/30/09
Received 06/30/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Carbazole	86-74-8	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
Hexachlorobutadiene	87-68-3	LA-523-456	U	<0.9		ug/L	1	0.9	4	07/09/09
2-Nitroaniline	88-74-4	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
2-Nitrophenol	88-75-5	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
Naphthalene	91-20-3	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
2-Methylnaphthalene	91-57-6	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
2-Chloronaphthalene	91-58-7	LA-523-456	U	<0.8		ug/L	1	0.8	4	07/09/09
3,3-Dichlorobenzidine	91-94-1	LA-523-456	U	<0.6		ug/L	1	0.6	4	07/09/09
2-Methylphenol	95-48-7	LA-523-456	U	<0.8		ug/L	1	0.8	4	07/09/09
1,2-Dichlorobenzene	95-50-1	LA-523-456	U	<0.9		ug/L	1	0.9	4	07/09/09
2,4,5-Trichlorophenol	95-95-4	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
Nitrobenzene	98-95-3	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
3-Nitroaniline	99-09-2	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09
3 & 4 Methylphenol, Total	65794-96-9	LA-523-456	U	<0.6		ug/L	1	0.6	4	07/09/09
Hexachloroethane	67-72-1	LA-523-456	U	<0.8		ug/L	1	0.8	4	07/09/09
2,4,6-Trichlorophenol	88-06-2	LA-523-456	U	<0.5		ug/L	1	0.5	4	07/09/09

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T - MS/MSD recovery outside control limits(GC/MS only).
U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

REVISED90686 -

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF90686

Sample # 90686001
SAF# F09-039
Sample ID B212F4

Matrix WATER
Sampled 06/30/09
Received 06/30/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
8260 Prep										**06/30/09**
SW-846 8260B										
1,1-Dichloroethene	75-35-4	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Trichloroethene	79-01-6	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Benzene	71-43-2	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Toluene	108-88-3	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Chlorobenzene	108-90-7	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
1,1-Dichloroethane	75-34-3	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
trans-1,3-Dichloropropene	10061-02-6	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
1,2-Dichloroethane	107-06-2	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Methyl isobutyl ketone	108-10-1	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Dibromochloromethane	124-48-1	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Tetrachloroethene	127-18-4	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Total Xylenes	1330-20-7	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Total 1,2-Dichloroethene	540-59-0	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Carbon tetrachloride	56-23-5	LA-523-455	J	3.1		ug/L	1	1	5	06/30/09
2-Hexanone	591-78-6	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Acetone	67-64-1	LA-523-455	U	<1		ug/L	1	1	5	06/30/09

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J - Analyte < PQL (or EQL) >= MDL.
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T - MS/MSD recovery outside control limits(GC/MS only).
U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
N - MS and/or MSD recovery outside control limits.
PQL is equivalent to Estimated Quantitation Limit (EQL)

REVISED90686 -

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF90686

Sample # 90686001
SAF# F09-039
Sample ID B212F4

Matrix WATER
Sampled 06/30/09
Received 06/30/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Chloroform	67-66-3	LA-523-455	J	1.9		ug/L	1	1	5	06/30/09
1,1,1-Trichloroethane	71-55-6	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Bromomethane	74-83-9	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Chloromethane	74-87-3	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Chloroethane	75-00-3	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Vinyl chloride	75-01-4	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Methylene chloride	75-09-2	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Carbon disulfide	75-15-0	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Bromoform	75-25-2	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Bromodichloromethane	75-27-4	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
1,2-Dichloropropane	78-87-5	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
Methyl ethyl ketone	78-93-3	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
1,1,2-Trichloroethane	79-00-5	LA-523-455	U	<1		ug/L	1	1	5	06/30/09
1,1,2,2-Tetrachloroethane	79-34-5	LA-523-455	U	<1		ug/L	1	1	5	06/30/09

MDL = Minimum Detection
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TP Err = Total Propagated
DF = Dilution Factor
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D - Analyte was reported at a secondary diltution factor.
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J - Analyte < PQL (or EQL) >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

T - MS/MSD recovery outside control limits(GC/MS only).
U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
N - MS and/or MSD recovery outside control limits.
PQL is equivalent to Estimated Quantitation Limit (EQL)

REVISED90686 -

Attention Michael Neely
Department Radiochemistry

Group # WSCF90686

Sample # 90686001
SAF# F09-039
Sample ID B212F4

Matrix WATER
Sampled 06/30/09
Received 06/30/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**07/08/09**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415	U	0.37	.39	pCi/L	1	0.60		07/13/09
Gross Beta	12587-47-2	LA-508-415	U	1.3	.98	pCi/L	1	1.6		07/13/09
GEA Prep										**07/09/09**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	7.1	8.2	pCi/L	1	15		07/15/09
Cobalt-60	10198-40-0	LA-508-481	U	2.3	7.9	pCi/L	1	15		07/15/09
Europium-152	14683-23-9	LA-508-481	U	-19	22	pCi/L	1	37		07/15/09
Europium-154	15585-10-1	LA-508-481	U	-4.5	22	pCi/L	1	39		07/15/09
Europium-155	14391-16-3	LA-508-481	U	-9.6	28	pCi/L	1	47		07/15/09
H3 EICHROM										**07/01/09**
TRI-CARB LSC										
Tritium	10028-17-8	LA-508-421	U	-100	140	pCi/L	1	240		07/01/09
ICPMS Prep										**07/02/09**
TC-99 ICP/MS										
Technetium-99	14133-76-7	LA-505-412	U	<0.0010		ug/L	1	0.0010		07/02/09

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TP Err = Total Propagated
DF = Dilution Factor
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U - Analyzed for but not detected above limiting criteria.
N - Spike Recovery is Outside Control Limits.
X,Y or Z - See comment detail and/or narrative.

REVISED90686 -

Quality Control Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF90686

QC Batch 53858
Associated Samples 90686001

Test SW-846 8260B Volatiles, separate prep

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #10848**							
1,1-Dichloroethene	75-35-4		<1	ug/L					U	06/30/09
Trichloroethene	79-01-6		<1	ug/L					U	06/30/09
Benzene	71-43-2		<1	ug/L					U	06/30/09
Toluene	108-88-3		<1	ug/L					U	06/30/09
Chlorobenzene	108-90-7		<1	ug/L					U	06/30/09
1,1-Dichloroethane	75-34-3		<1	ug/L					U	06/30/09
trans-1,3-Dichloropropene	10061-02-6		<1	ug/L					U	06/30/09
1,2-Dichloroethane	107-06-2		<1	ug/L					U	06/30/09
Methyl isobutyl ketone	108-10-1		<1	ug/L					U	06/30/09
Dibromochloromethane	124-48-1		<1	ug/L					U	06/30/09
Tetrachloroethene	127-18-4		<1	ug/L					U	06/30/09
Total Xylenes	1330-20-7		<1	ug/L					U	06/30/09
Total 1,2-Dichloroethene	540-59-0		<1	ug/L					U	06/30/09
Carbon tetrachloride	56-23-5		<1	ug/L					U	06/30/09
2-Hexanone	591-78-6		<1	ug/L					U	06/30/09
Acetone	67-64-1		<1	ug/L					U	06/30/09
Chloroform	67-66-3		<1	ug/L					U	06/30/09

REVISED90686 -

Quality Control Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF90686

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
1,1,1-Trichloroethane	71-55-6		<1	ug/L					U	06/30/09
Bromomethane	74-83-9		<1	ug/L					U	06/30/09
Chloromethane	74-87-3		<1	ug/L					U	06/30/09
Chloroethane	75-00-3		<1	ug/L					U	06/30/09
Vinyl chloride	75-01-4		<1	ug/L					U	06/30/09
Methylene chloride	75-09-2		<1	ug/L					U	06/30/09
Carbon disulfide	75-15-0		<1	ug/L					U	06/30/09
Bromoform	75-25-2		<1	ug/L					U	06/30/09
Bromodichloromethane	75-27-4		<1	ug/L					U	06/30/09
1,2-Dichloropropane	78-87-5		<1	ug/L					U	06/30/09
Methyl ethyl ketone	78-93-3		<1	ug/L					U	06/30/09
1,1,2-Trichloroethane	79-00-5		<1	ug/L					U	06/30/09
1,1,2,2-Tetrachloroethane	79-34-5		<1	ug/L					U	06/30/09
LCS			**QC Sample #10849**							
1,1-Dichloroethene	75-35-4		20	ug/L	81.4	75 - 125				06/30/09
Trichloroethene	79-01-6		21	ug/L	82.6	75 - 125				06/30/09
Benzene	71-43-2		24	ug/L	96.9	75 - 125				06/30/09
Toluene	108-88-3		25	ug/L	99.2	75 - 125				06/30/09
Chlorobenzene	108-90-7		25	ug/L	98.2	75 - 125				06/30/09
MS			**QC Sample #10850**							
			Original 90678001							
1,1-Dichloroethene	75-35-4		23	ug/L	92.4	75 - 125				06/30/09
Trichloroethene	79-01-6		24	ug/L	95	75 - 125				06/30/09

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Quality Control Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF90686

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Benzene	71-43-2		24	ug/L	97	75 - 125				06/30/09
Toluene	108-88-3		25	ug/L	101.4	75 - 125				06/30/09
Chlorobenzene	108-90-7		24	ug/L	97.4	75 - 125				06/30/09
MSD			**QC Sample #10851**							
			Original 90678001					**Paired**	**10850**	
1,1-Dichloroethene	75-35-4		23	ug/L	92.8	75 - 125	0.40	20		06/30/09
Trichloroethene	79-01-6		24	ug/L	96.7	75 - 125	1.80	20		06/30/09
Benzene	71-43-2		24	ug/L	97.7	75 - 125	0.70	20		06/30/09
Toluene	108-88-3		25	ug/L	101.4	75 - 125	0.00	20		06/30/09
Chlorobenzene	108-90-7		25	ug/L	100.7	75 - 125	3.30	20		06/30/09

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF90686

QC Batch 53877
Associated Samples 90686001

Test Anions by Ion Chromatography (Water)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #10895**							
Fluoride	16984-48-8		<0.030	ug/mL					U	06/30/09
Chloride	16887-00-6		<0.043	ug/mL					U	06/30/09
Nitrate-N	NO3-N		<0.031	ug/mL					U	06/30/09
Sulfate	14808-79-8		<0.066	ug/mL					U	06/30/09
LCS			**QC Sample #10896**							
Fluoride	16984-48-8		0.951	ug/mL	95.1	90 - 110				06/30/09
Chloride	16887-00-6		2.01	ug/mL	103.1	90 - 110				06/30/09
Nitrate-N	NO3-N		0.900	ug/mL	102.1	90 - 110				06/30/09
Sulfate	14808-79-8		4.04	ug/mL	102.9	90 - 110				06/30/09
DUP			**QC Sample #10897**							
			Original 90686001							
Fluoride	16984-48-8	<0.030	<0.030	ug/mL			0.00	20	U	06/30/09
Chloride	16887-00-6	8.62	8.64	ug/mL			0.20	20		06/30/09
Nitrate-N	NO3-N	0.0310	<0.031	ug/mL			0.60	20	U	06/30/09
Sulfate	14808-79-8	0.384	0.389	ug/mL			1.30	20	B	06/30/09
MS			**QC Sample #10898**							
			Original 90686001							
Fluoride	16984-48-8	<0.030	0.495	ug/mL	98.1	80 - 120				06/30/09

REVISED90686 -

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF90686

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Chloride	16887-00-6	8.62	0.882	ug/mL	89.5	80 - 120				06/30/09
Nitrate-N	NO3-N	0.0310	0.478	ug/mL	107.4	80 - 120				06/30/09
Sulfate	14808-79-8	0.384	2.02	ug/mL	101.8	80 - 120				06/30/09
MSD			**QC Sample #10899**							
			Original 90686001					**Paired**	**10898**	
Fluoride	16984-48-8	<0.030	0.489	ug/mL	96.8	80 - 120	1.30	20		06/30/09
Chloride	16887-00-6	8.62	0.974	ug/mL	98.8	80 - 120	9.90	20		06/30/09
Nitrate-N	NO3-N	0.0310	0.485	ug/mL	109	80 - 120	1.50	20		06/30/09
Sulfate	14808-79-8	0.384	2.04	ug/mL	102.8	80 - 120	1.00	20		06/30/09

Quality Control Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF90686

QC Batch 54040
Associated Samples 90686001

Test SW-846 8270D Semivolatiles

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #11012**						
4-Nitrophenol	100-02-7		<1	ug/L				U	07/09/09
1,4-Dichlorobenzene	106-46-7		<1	ug/L				U	07/09/09
Phenol	108-95-2		<1	ug/L				U	07/09/09
1,2,4-Trichlorobenzene	120-82-1		<1	ug/L				U	07/09/09
2,4-Dinitrotoluene	121-14-2		<1	ug/L				U	07/09/09
Pyrene	129-00-0		<1	ug/L				U	07/09/09
4-Chloro-3-methylphenol	59-50-7		<1	ug/L				U	07/09/09
n-Nitroso-di-n-propylamine	621-64-7		<1	ug/L				U	07/09/09
Acenaphthene	83-32-9		<1	ug/L				U	07/09/09
Pentachlorophenol	87-86-5		<1	ug/L				U	07/09/09
2-Chlorophenol	95-57-8		<1	ug/L				U	07/09/09
4-Nitroaniline	100-01-6		<1	ug/L				U	07/09/09
4-Bromophenyl-phenylether	101-55-3		<1	ug/L				U	07/09/09
2,4-Dimethylphenol	105-67-9		<1	ug/L				U	07/09/09
4-Chloroaniline	106-47-8		<1	ug/L				U	07/09/09
Bis(1-Chloro-2-propyl)ether	108-60-1		<1	ug/L				U	07/09/09

REVISED90686 -

Quality Control Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF90686

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
Bis-(2-Chloroethyl) ether	111-44-4		<1	ug/L				U	07/09/09
Bis-(2-Chloroethoxy)methane	111-91-1		<1	ug/L				U	07/09/09
Bis-(2-Ethylhexyl)phthalate	117-81-7		<1	ug/L				U	07/09/09
Di-n-octylphthalate	117-84-0		<1	ug/L				U	07/09/09
Hexachlorobenzene	118-74-1		<1	ug/L				U	07/09/09
Anthracene	120-12-7		<1	ug/L				U	07/09/09
2,4-Dichlorophenol	120-83-2		<1	ug/L				U	07/09/09
Dimethylphthalate	131-11-3		<1	ug/L				U	07/09/09
Dibenzofuran	132-64-9		<1	ug/L				U	07/09/09
Benzo(g,h,i)perylene	191-24-2		<1	ug/L				U	07/09/09
Indeno(1,2,3-cd)pyrene	193-39-5		<1	ug/L				U	07/09/09
Benzo(b)fluoranthene	205-99-2		<1	ug/L				U	07/09/09
Fluoranthene	206-44-0		<1	ug/L				U	07/09/09
Benzo(k)fluoranthene	207-08-9		<1	ug/L				U	07/09/09
Acenaphthylene	208-96-8		<1	ug/L				U	07/09/09
Chrysene	218-01-9		<1	ug/L				U	07/09/09
Benzo(a)pyrene	50-32-8		<1	ug/L				U	07/09/09
2,4-Dinitrophenol	51-28-5		<1	ug/L				U	07/09/09
Dibenzo(a,h)anthracene	53-70-3		<1	ug/L				U	07/09/09
4,6-Dinitro-2-methylphenol	534-52-1		<1	ug/L				U	07/09/09
1,3-Dichlorobenzene	541-73-1		<1	ug/L				U	07/09/09

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Quality Control Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF90686

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
Benzo(a)anthracene	56-55-3		<1	ug/L				U	07/09/09
2,6-Dinitrotoluene	606-20-2		<1	ug/L				U	07/09/09
4-Chlorophenyl-phenylether	7005-72-3		<1	ug/L				U	07/09/09
Hexachlorocyclopentadiene	77-47-4		<1	ug/L				U	07/09/09
Isophorone	78-59-1		<1	ug/L				U	07/09/09
Diethyl phthalate	84-66-2		<1	ug/L				U	07/09/09
Di-n-butylphthalate	84-74-2		<1	ug/L				U	07/09/09
Phenanthrene	85-01-8		<1	ug/L				U	07/09/09
Butylbenzylphthalate	85-68-7		<1	ug/L				U	07/09/09
n-Nitrosodiphenylamine	86-30-6		<1	ug/L				U	07/09/09
Fluorene	86-73-7		<1	ug/L				U	07/09/09
Carbazole	86-74-8		<1	ug/L				U	07/09/09
Hexachlorobutadiene	87-68-3		<1	ug/L				U	07/09/09
2-Nitroaniline	88-74-4		<1	ug/L				U	07/09/09
2-Nitrophenol	88-75-5		<1	ug/L				U	07/09/09
Naphthalene	91-20-3		<1	ug/L				U	07/09/09
2-Methylnaphthalene	91-57-6		<1	ug/L				U	07/09/09
2-Chloronaphthalene	91-58-7		<1	ug/L				U	07/09/09
3,3-Dichlorobenzidine	91-94-1		<1	ug/L				U	07/09/09
2-Methylphenol	95-48-7		<1	ug/L				U	07/09/09
1,2-Dichlorobenzene	95-50-1		<1	ug/L				U	07/09/09
2,4,5-Trichlorophenol	95-95-4		<1	ug/L				U	07/09/09
Nitrobenzene	98-95-3		<1	ug/L				U	07/09/09

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Quality Control Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF90686

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
3-Nitroaniline	99-09-2		<1	ug/L					U	07/09/09
3 & 4 Methylphenol, Total	65794-96-9		<1	ug/L					U	07/09/09
Hexachloroethane	67-72-1		<1	ug/L					U	07/09/09
2,4,6-Trichlorophenol	88-06-2		<1	ug/L					U	07/09/09
LCS			**QC Sample #11013**							
4-Nitrophenol	100-02-7		25	ug/L	84.6	32 - 118				07/09/09
1,4-Dichlorobenzene	106-46-7		19	ug/L	94.2	42 - 111				07/09/09
Phenol	108-95-2		28	ug/L	93.5	67 - 105				07/09/09
1,2,4-Trichlorobenzene	120-82-1		19	ug/L	96.4	46 - 107				07/09/09
2,4-Dinitrotoluene	121-14-2		19	ug/L	93.8	59 - 106				07/09/09
Pyrene	129-00-0		21	ug/L	106.9	66 - 118				07/09/09
4-Chloro-3-methylphenol	59-50-7		28	ug/L	93.8	61 - 106				07/09/09
n-Nitroso-di-n-propylamine	621-64-7		19	ug/L	93.8	71 - 114				07/09/09
Acenaphthene	83-32-9		19	ug/L	94.8	61 - 116				07/09/09
Pentachlorophenol	87-86-5		31	ug/L	102.9	62 - 114				07/09/09
2-Chlorophenol	95-57-8		29	ug/L	95.7	66 - 106				07/09/09
MS			**QC Sample #11014**							
			Original 90697002							
4-Nitrophenol	100-02-7		-0.12	ug/L	-0.4				T	07/09/09
1,4-Dichlorobenzene	106-46-7		16	ug/L	85.1					07/09/09
Phenol	108-95-2		26	ug/L	91.1					07/09/09
1,2,4-Trichlorobenzene	120-82-1		17	ug/L	87.6					07/09/09

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Quality Control Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF90686

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
2,4-Dinitrotoluene	121-14-2		18	ug/L	91.9						07/09/09
Pyrene	129-00-0		18	ug/L	93.5						07/09/09
4-Chloro-3-methylphenol	59-50-7		13	ug/L	44.4					T	07/09/09
n-Nitroso-di-n-propylamine	621-64-7		18	ug/L	92.9						07/09/09
Acenaphthene	83-32-9		16	ug/L	84.5						07/09/09
Pentachlorophenol	87-86-5		25	ug/L	88.5						07/09/09
2-Chlorophenol	95-57-8		13	ug/L	46.5					T	07/09/09
MSD			**QC Sample #11015**								
			Original 90697002						**Paired**	**11014**	
4-Nitrophenol	100-02-7		30	ug/L	106.5		201.50	20	*		07/09/09
1,4-Dichlorobenzene	106-46-7		17	ug/L	86.9		2.10	20			07/09/09
Phenol	108-95-2		7.4	ug/L	25.9		111.50	20	*	T	07/09/09
1,2,4-Trichlorobenzene	120-82-1		17	ug/L	87.1		0.60	20			07/09/09
2,4-Dinitrotoluene	121-14-2		18	ug/L	94.5		2.80	20			07/09/09
Pyrene	129-00-0		21	ug/L	110.8		16.90	20			07/09/09
4-Chloro-3-methylphenol	59-50-7		3.9	ug/L	13.6		106.20	20	*	JT	07/09/09
n-Nitroso-di-n-propylamine	621-64-7		18	ug/L	96.2		3.50	20			07/09/09
Acenaphthene	83-32-9		17	ug/L	88.1		4.20	20			07/09/09
Pentachlorophenol	87-86-5		25	ug/L	87.5		1.10	20			07/09/09
2-Chlorophenol	95-57-8		12	ug/L	43.6		6.40	20		T	07/09/09

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF90686

QC Batch 54064
Associated Samples 90686001

Test ICP-6010 - All possible metals

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #11059**							
Magnesium	7439-95-4		<16	ug/L					U	07/14/09
Sodium	7440-23-5		<23	ug/L					U	07/14/09
Cadmium	7440-43-9		<4.0	ug/L					U	07/14/09
Chromium	7440-47-3		<13	ug/L					U	07/14/09
Calcium	7440-70-2		<39	ug/L					U	07/14/09
Arsenic	7440-38-2		<65	ug/L					U	07/14/09
Silicon	7440-21-3		<61	ug/L					U	07/14/09
LCS			**QC Sample #11060**							
Magnesium	7439-95-4		1000	ug/L	100.1	80 - 120				07/14/09
Sodium	7440-23-5		1060	ug/L	105.5	80 - 120				07/14/09
Cadmium	7440-43-9		995	ug/L	99.5	80 - 120				07/14/09
Chromium	7440-47-3		1040	ug/L	103.7	80 - 120				07/14/09
Calcium	7440-70-2		1030	ug/L	102.8	80 - 120				07/14/09
Arsenic	7440-38-2		1080	ug/L	108	80 - 120				07/14/09
Silicon	7440-21-3		991	ug/L	99.1	80 - 120				07/14/09
MS			**QC Sample #11061**							
			Original 90694002							
Magnesium	7439-95-4		1000	ug/L	100.2	75 - 125				07/14/09

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Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF90686

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
Sodium	7440-23-5		1110	ug/L	111	75 - 125				X	07/14/09
Cadmium	7440-43-9		987	ug/L	98.7	75 - 125					07/14/09
Chromium	7440-47-3		1060	ug/L	106.3	75 - 125					07/14/09
Calcium	7440-70-2		1030	ug/L	102.9	75 - 125					07/14/09
Arsenic	7440-38-2		1060	ug/L	105.6	75 - 125					07/14/09
Silicon	7440-21-3		1040	ug/L	104	75 - 125					07/14/09
MSD			**QC Sample #11062**								
			Original 90694002						**Paired**	**11061**	
Magnesium	7439-95-4		952	ug/L	95.2	75 - 125	5.10	20			07/14/09
Sodium	7440-23-5		707	ug/L	70.7	75 - 125	44.40	20	*	X	07/14/09
Cadmium	7440-43-9		963	ug/L	96.3	75 - 125	2.50	20			07/14/09
Chromium	7440-47-3		1010	ug/L	101.1	75 - 125	5.00	20			07/14/09
Calcium	7440-70-2		939	ug/L	93.9	75 - 125	9.10	20			07/14/09
Arsenic	7440-38-2		1090	ug/L	109.4	75 - 125	3.50	20			07/14/09
Silicon	7440-21-3		1080	ug/L	107.8	75 - 125	3.60	20			07/14/09

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF90686

QC Batch 53886
Associated Samples 90686001

Test Tritium by LSC

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #10941**							
Tritium	10028-17-8		-75	pCi/L					U	07/01/09
LCS			**QC Sample #10942**							
Tritium	10028-17-8		3000	pCi/L	99.5	80 - 120				07/01/09
DUP			**QC Sample #10943**							
			Original 90688001							
Tritium	10028-17-8		2.2E5	pCi/L			0.00	-20 - 20		07/01/09
MS			**QC Sample #10944**							
			Original 90688001							
Tritium	10028-17-8		19000	pCi/L	81.1	75 - 125				07/01/09

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF90686

QC Batch 54037
Associated Samples 90686001

Test Technicium-99 by ICP MS

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #11010**							
Technetium-99	14133-76-7		<0.0010	ug/L					U	07/02/09
LCS			**QC Sample #11011**							
Technetium-99	14133-76-7		0.040	ug/L	91.8	49 - 125				07/02/09

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF90686

QC Batch 54062
Associated Samples 90686001

Test Gross Alpha/Gross Beta

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #11052**								
Gross Alpha	12587-46-1		0.18	pCi/L						U	07/13/09
Gross Beta	12587-47-2		0.61	pCi/L						U	07/13/09
LCS			**QC Sample #11053**								
Gross Alpha	12587-46-1		31	pCi/L	96.2	80 - 120					07/13/09
Gross Beta	12587-47-2		130	pCi/L	114.5	80 - 120					07/13/09
DUP			**QC Sample #11054**								
			Original 90686001								
Gross Alpha	12587-46-1	0.37	0.46	pCi/L			21.70	-20 - 20	*	U	07/13/09
Gross Beta	12587-47-2	1.3	-0.025	pCi/L			207.80	-20 - 20	*	U	07/13/09

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF90686

QC Batch 54118
Associated Samples 90686001

Test Gamma Energy Analysis-general

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #11167**								
Cesium-137	10045-97-3		1100	pCi/sample						U	07/15/09
Cobalt-60	10198-40-0		980	pCi/sample						U	07/15/09
Europium-152	14683-23-9		-2800	pCi/sample						U	07/15/09
Europium-154	15585-10-1		-7100	pCi/sample						U	07/15/09
Europium-155	14391-16-3		2400	pCi/sample						U	07/15/09
LCS			**QC Sample #11168**								
Cesium-137	10045-97-3		6300	pCi/sample	103.6	80 - 120					07/15/09
Cobalt-60	10198-40-0		9900	pCi/sample	100	80 - 120					07/15/09
DUP			**QC Sample #11169**								
			Original 90694001								
Cesium-137	10045-97-3		10	pCi/L			569.20	-20 - 20	*	U	07/15/09
Cobalt-60	10198-40-0		4.9	pCi/L			475.90	-20 - 20	*	U	07/15/09
Europium-152	14683-23-9		-22	pCi/L			-466.70	-20 - 20	*	U	07/15/09
Europium-154	15585-10-1		0.80	pCi/L			-215.80	-20 - 20	*	U	07/15/09
Europium-155	14391-16-3		22	pCi/L			160.70	-20 - 20	*	U	07/15/09

Quality Control Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF90686

QC Batch 53858
Associated Samples 90686001

Test SW-846 8260B Volatiles, separate prep

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #10848**							
1,2-Dichloroethane-d4	17060-07-0				109.1	75 - 125				06/30/09
Toluene-d8	2037-26-5				98.3	75 - 125				06/30/09
4-Bromofluorobenzene	460-00-4				97.7	75 - 125				06/30/09
LCS			**QC Sample #10849**							
1,2-Dichloroethane-d4	17060-07-0				110.2	75 - 125				06/30/09
Toluene-d8	2037-26-5				98.6	75 - 125				06/30/09
4-Bromofluorobenzene	460-00-4				97.3	75 - 125				06/30/09
MS			**QC Sample #10850**							
			Original 90678001							
1,2-Dichloroethane-d4	17060-07-0				113.2	75 - 125				06/30/09
Toluene-d8	2037-26-5				98.9	75 - 125				06/30/09
4-Bromofluorobenzene	460-00-4				97.6	75 - 125				06/30/09
MSD			**QC Sample #10851**							
			Original 90678001					**Paired 10850**		
1,2-Dichloroethane-d4	17060-07-0				115.6	75 - 125	2.10	20		06/30/09
Toluene-d8	2037-26-5				99.3	75 - 125	0.40	20		06/30/09

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Quality Control Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF90686

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
4-Bromofluorobenzene	460-00-4				98.5	75 - 125	0.90	20		06/30/09
SAMPLE			**Sample #90686001**							
1,2-Dichloroethane-d4	17060-07-0				109.4	75 - 125				06/30/09
Toluene-d8	2037-26-5				100.4	75 - 125				06/30/09
4-Bromofluorobenzene	460-00-4				97	75 - 125				06/30/09

Quality Control Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF90686

QC Batch 54040
Associated Samples 90686001

Test SW-846 8270D Semivolatiles

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #11012**							
2-Fluorophenol	367-12-4				81.8	44 - 135				07/09/09
Phenol-d5	4165-62-2				90	41 - 136				07/09/09
Nitrobenzene-d5	4165-60-0				96.9	53 - 129				07/09/09
2-Fluorobiphenyl	321-60-8				95.8	36 - 141				07/09/09
2,4,6-Tribromophenol	118-79-6				89.2	17 - 142				07/09/09
Terphenyl-d14	98904-43-9				114.8	61 - 142				07/09/09
LCS			**QC Sample #11013**							
2-Fluorophenol	367-12-4				106.1	50 - 110				07/09/09
Phenol-d5	4165-62-2				98.7	59 - 116				07/09/09
Nitrobenzene-d5	4165-60-0				97.3	60 - 118				07/09/09
2-Fluorobiphenyl	321-60-8				97.6	58 - 109				07/09/09
2,4,6-Tribromophenol	118-79-6				98.9	60 - 120				07/09/09
Terphenyl-d14	98904-43-9				110.5	60 - 120				07/09/09
MS			**QC Sample #11014**							
			Original	**90697002**						
2-Fluorophenol	367-12-4				10.6	44 - 135				07/09/09
Phenol-d5	4165-62-2				65	41 - 136				07/09/09
Nitrobenzene-d5	4165-60-0				92.8	53 - 129				07/09/09

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Quality Control Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF90686

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
2-Fluorobiphenyl	321-60-8				86.9	36 - 141					07/09/09
2,4,6-Tribromophenol	118-79-6				63.9	17 - 142					07/09/09
Terphenyl-d14	98904-43-9				66.9	61 - 142					07/09/09
MSD			**QC Sample #11015**								
			Original	**90697002**					**Paired**	**11014**	
2-Fluorophenol	367-12-4				27.5	44 - 135	88.70	20	*		07/09/09
Phenol-d5	4165-62-2				44.7	41 - 136	37.00	20	*		07/09/09
Nitrobenzene-d5	4165-60-0				89.2	53 - 129	4.00	20			07/09/09
2-Fluorobiphenyl	321-60-8				96.5	36 - 141	10.50	20			07/09/09
2,4,6-Tribromophenol	118-79-6				26	17 - 142	84.30	20	*		07/09/09
Terphenyl-d14	98904-43-9				116.9	61 - 142	54.40	20	*		07/09/09
SAMPLE			**Sample #90686001**								
2-Fluorophenol	367-12-4				77.8	50 - 110					07/09/09
Phenol-d5	4165-62-2				81.1	59 - 116					07/09/09
Nitrobenzene-d5	4165-60-0				84.1	60 - 118					07/09/09
2-Fluorobiphenyl	321-60-8				78.8	58 - 109					07/09/09
2,4,6-Tribromophenol	118-79-6				90.2	60 - 120					07/09/09
Terphenyl-d14	98904-43-9				102.2	60 - 120					07/09/09

Tentatively Identified Peak Report

REVISION 1

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF90686

Peak Name		CAS #	RT	RQ	Result	Units
90686001	**B212F4**					
Unknown Alcohol		UNKNOWN-01	4.6448		11	ug/L
Unknown Amine		UNKNOWN-02	6.6704		29	ug/L
Unknown Amine		UNKNOWN-03	6.7024		34	ug/L
Cyclodecane		293-96-9	10.684		6	ug/L
Unknown Amine		UNKNOWN-05	11.0795		6.7	ug/L
Unknown Alkane		UNKNOWN-06	12.410		7.9	ug/L
Unknown Phthalate		UNKNOWN-07	13.361		5	ug/L
Unknown Ester		UNKNOWN-08	14.136		13	ug/L
Unknown Amine		UNKNOWN-09	14.548		19	ug/L
Unknown Alkane		UNKNOWN-10	14.719		11	ug/L
Triclosan		3380-34-5	14.948		7.4	ug/L
Unknown Alkane		UNKNOWN-12	15.269		15	ug/L
Unknown		UNKNOWN-13	15.381		23	ug/L
Unknown Ester		UNKNOWN-14	15.654		63	ug/L
Unknown Alkane		UNKNOWN-15	15.787		140	ug/L
Unknown Alcohol		UNKNOWN-16	16.172		170	ug/L
Hexaethylene glycol mo		3055-96-7	17.001		69	ug/L
Unknown Alcohol		UNKNOWN-18	17.428		62	ug/L

Attention: Michael Neely **Group #** WSCF90686

90686001	B212F4

SVOA: The matrix of the sample matrix spike interacted with the phenolic surrogates and some phenolic matrix spike compounds causing low recoveries for these compounds. This effect was not found in other samples, LCS or blank confirming matrix effect of the sample spiked. cgc

Quality Control Comments

Department Inorganic

11061 B212D6(90694002MS)

Analyte Sodium - ICP-6010 - All possible metals

[1] X-Flag

[2] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

11062 B212D6(90694002MSD)

Analyte Sodium - ICP-6010 - All possible metals

[1] X-Flag

[2] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analytical Comment Report

Attention: Michael Neely

Group # WSCF90686

Quality Control Comments

11014	**B212F2(90697002MS)**

SVOA: several of the phenolic spikes low in the MS/MSD, but recoveries were good in the LCS. gar

ATTACHMENT4

SAMPLE RECEIPT

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

ACKNOWLEDGEMENT OF SAMPLES RECEIVED

WSCF Laboratory
PO Box 1000 S3-30
Richland, WA 99352

ATTN: Michael Neely

Customer Code: CHPRC
PO #: 131280
Work Order #: 90686
Profile #: F09-039-010
Proj. Mgr.:
Phone:

The following samples were received from you on 6/30/2009 10:50:00 AM. 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	Matrix	Collected	Received
		Tests scheduled		
90686001	B212F4	WATER	6/30/2009 10:20	6/30/2009 10:50
		6010-W; 8260V-W; 8270SV-W; GAB-AO-W; GAB-BO-W; GEA-W; H3-COL-W; IC-W; TC99-MS-W		

Test Acronym Description

Test Acronym	Description
6010-W	ICP-AES (W)
8260V-W	Volatiles by 8260B (W)
8270SV-W	Semivolatiles by 8270D (W)
GAB-AO-W	Gross Alpha/Beta (A only)(W)
GAB-BO-W	Gross Alpha/Beta (B only)(W)
GEA-W	Gamma Energy Analysis (W)
H3-COL-W	Tritium by EICHROM Column (W)
IC-W	Anions by IC (W)
TC99-MS-W	TECHNICIUM 99 BY ICP-MS

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-039-010

PAGE 1 OF 2

COLLECTION: Fulton	COMPANY CONTACT: DVERDMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DVERDMAN, DL
PRICE CODE: 7G	DATA TURNAROUND: 15 Days / 30 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: 200-BC-1 OU2 Soil Desiccation; WATER - EB	PROJECT DESIGNATION: 200-BC-1 OU2 Soil Dessication Pilot Test - Characterization Phase (Water)	SAF NO.: F09-039	
ICE CHEST NO.: —	FIELD LOGBOOK NO.: HNF-N-595-1	ACTUAL SAMPLE DEPTH: —	COA: 301/056530
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			
SHIPPED TO: Waste Sampling & Characterization 90686	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 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

PRESERVATION	HCl or H2SO4 to pH <2/Cool=4C	Cool=4C	HNO3 to pH <2	Cool=4C	None	HNO3 to pH <2	None			
TYPE OF CONTAINER	aOx*	aG	GP	P	Polypropylene	Square Bottle - Poly	G			
NO. OF CONTAINER(S)	4	3	1	1	0	1	1			
VOLUME	40mL	1000mL	500mL	500mL	0mL	500mL	250mL			
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Gamma-GA - 8270B (TCL)	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	pH - 150.1 (Off Manual Method)	SEE ITEM (4) IN SPECIAL INSTRUCTIONS	90 Gam - Em D.			

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME								
B212F4	D01	WATER	6-30-09	1020	✓	✓	✓	✓	N/A	✓	✓	

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[signature]	6-30-09 1050	TA FRAZIER [signature]	6-30-09 1050
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

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ICED

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	RECEIVED BY	DATE/TIME

A-6007-412(12/89)

Chain of Custody

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-039-010	PAGE 2 OF 2
COLLECTOR: Fulton	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 7G	DATA TURNAROUND: 15 Days / 30 Days
SAMPLING LOCATION: 200-BC-1 DVZ Soil Desiccation; WATER - EB	PROJECT DESIGNATION: 200 BC 1 DVZ Soil Desiccation Pilot Test - Characterization Phase (Water)		SAF NO.: F09-039	AIR QUALITY:	
ICE CHEST NO.: —	FIELD LOGBOOK NO.: HNF-N-585-3	ACTUAL SAMPLE DEPTH: N/A	COA: 301405ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

SPECIAL INSTRUCTIONS

** The 200 Area 58GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)VOA - 8260B (TCL) (1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,2-Dichloroethane, 1,2-Dichloroethene (Total), 1,2-Dichloropropane, 2-Butanone, 2-Hexanone, 2-Pentanone, 4-Methyl, Acetone, Benzene, Bromodichloromethane, Bromoform, Bromomethane, Carbon disulfide, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloroform, Chloromethane, Dibromochloromethane, Methylene chloride, Tetrachloroethene, Toluene, Trichloroethene, Vinyl chloride, Xylenes (total), trans-1,3-Dichloropropene)
(2)ICP Metals - 6010A (TAL) (Cadmium, Calcium, Chromium, Magnesium, Sodium) ICP Metals - 6010A (Add-on) (Arsenic, Silica) Tc-99 by ICPMS (Technetium-99)
(3)IC Anions - 300.0 (Chloride, Fluoride, Nitrogen in Nitrate, Sulfate)
(4)Gamma Spectroscopy (Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155) Gross Alpha (Gross alpha) Gross Beta (Gross beta)

ICED

A-6000-615(01/06)