WSCF Laboratory

PO Box 650 S3-30
Richland, WA 99352

RECEIVED JANUARY 14, 2011

0096568

January 13, 2011

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

Dear Michael Neely,

FINAL RESULT FOR SAMPLE DELIVERY GROUP WSCF102920

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 WSCF102920

* 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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Attachments 4

CC: w/Attachments

File/LB

ATTACHMENT 1

COVER SHEET

Consisting of 2 pages
Including cover page

WSCF SAF Number Cross Reference

Group # WSCF102920
Data Deliverable Date 12/27/10

SAF #	Sample ID	Sample #	Matrix	Sampled	Received
F10-196	B282Y5	102920001	SOIL	11/10/10	11/11/10
F10-196	B282Y6	102920002	SOIL	11/10/10	11/11/10
F10-196	B28301	102920003	SOIL	11/10/10	11/11/10
F10-196	B28302	102920004	SOIL	11/10/10	11/11/10

ATTACHMENT 2

NARRATIVE

Consisting of 3 pages
Including cover page

Attachment 2
Narrative
WSCF102920

Introduction

Four (4) S&GRP samples were received at the WSCF Laboratory on November 11, 2010. The 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. However, based on procedure LO-090-403 form "NOTICE OF IMPROPER SAMPLE SUBMITTAL" was not submitted and was not stamped "NOT ICED". No anomaly was noted during sample receipt.

The following generic data qualifiers (i.e., B, D, U 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 wet chemical 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.
- **U** – Analyzed for but not detected above limiting criteria. Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.

Analytical Methodology for Requested Analyses

Refer to *WSCF Method References Report* for a complete listing of approved analytical methods.

Inorganic Comments

Anions – Hold time requirements 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):

- Batch QC 169842 analyzed on sample# B297H5 (102903017)
    - Fluoride, Nitrate and Phosphate – Matrix Spike and/or Matrix Spike Duplicate recoveries are outside established laboratory limits. Affected sample results in this batch were "N" flagged.

- Chloride – Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results near or below the minimum detectable level. No flags issued.

All other applicable 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. Analytical Note(s):

- Batch QC 170023 analyzed on sample# B28301 (102920003)
  - Selenium – Detected in the Blank and evaluated. Affected sample results in this batch were "C" Flagged.

All other applicable QC controls are within the established limits.

Organic Comments

VOA – The hold time requirement 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):

- Batch QC 169806 analyzed on sample# B297H8 (102903010)

All applicable QC controls are within the established limits.

Radiochemistry Comments

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

- Isotopic Uranium analysis:
  - Batch QC 170514 analyzed on sample# B28301 (102920003)

All applicable 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 3

ANALYTICAL RESULTS

Consisting of 40 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 #	WSCF102920
Report Date	January 13, 2011

Analytical: Electronically signed by Joseph Hale

Client Services: Electronically signed by Richard Barker

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 # WSCF102920

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
169842	169849	2	BLANK	41755	BLANK		Anions by Ion Chromatography (Solid)
169842	169849	3	LCS	41756	LCS		Anions by Ion Chromatography (Solid)
169842	169849	4	MS	41757	B297H5(102903017MS)	102903017	Anions by Ion Chromatography (Solid)
169842	169849	5	MSD	41758	B297H5(102903017MSD)	102903017	Anions by Ion Chromatography (Solid)
169842	169849	6	DUP	41759	B297H5(102903017DUP)	102903017	Anions by Ion Chromatography (Solid)
169842	169849	15	SAMPLE	102920003	B28301		Anions by Ion Chromatography (Solid)
169842	169849	16	SAMPLE	102920004	B28302		Anions by Ion Chromatography (Solid)
170023	170024	4	BLANK	42189	BLANK		ICP-2008 MS All possible metal
170023	170024	5	LCS	42190	LCS		ICP-2008 MS All possible metal
170023	170024	6	MS	42191	B28301(102920003MS)	102920003	ICP-2008 MS All possible metal
170023	170024	7	MSD	42192	B28301(102920003MSD)	102920003	ICP-2008 MS All possible metal
170023	170024	8	SAMPLE	102920003	B28301		ICP-2008 MS All possible metal
170023	170024	9	SAMPLE	102920004	B28302		ICP-2008 MS All possible metal

Batch QC List

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF102920

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
169806	169807	1	BLANK	41647	BLANK		SW-846 8260B Volatiles, separate prep
169806	169807	2	LCS	41648	LCS		SW-846 8260B Volatiles, separate prep
169806	169807	3	MS	41649	B297H8(102903010MS)	102903010	SW-846 8260B Volatiles, separate prep
169806	169807	4	MSD	41650	B297H8(102903010MSD)	102903010	SW-846 8260B Volatiles, separate prep
169806	169807	10	SAMPLE	102920001	B282Y5		SW-846 8260B Volatiles, separate prep
169806	169807	11	SAMPLE	102920002	B282Y6		SW-846 8260B Volatiles, separate prep

Batch QC List

Attention Michael Neely
Department Radiochemistry

Group # WSCF102920

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
170514	170956	1	DUP	42981	B28301(102920003DUP)	102920003	Uranium (AEA)
170514	170956	2	SAMPLE	102920003	B28301		Uranium (AEA)
170514	170956	3	SAMPLE	102920004	B28302		Uranium (AEA)
170514	170956	7	BLANK	42979	BLANK		Uranium (AEA)
170514	170956	8	LCS	42980	LCS		Uranium (AEA)

Batch QC List

Attention Michael Neely
Department Wet Chemistry

Group # WSCF102920

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
170456	170456	6	SAMPLE	102920001	B282Y5		Dry Weight/Percent Moisture
170456	170456	7	SAMPLE	102920002	B282Y6		Dry Weight/Percent Moisture
170456	170456	8	SAMPLE	102920003	B28301		Dry Weight/Percent Moisture
170456	170456	9	SAMPLE	102920004	B28302		Dry Weight/Percent Moisture

Method Reference

Attention Michael Neely
Department Inorganic

Group # WSCF102920

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-505-412	Determination of Trace Elements in Waters & Wastes by ICP-Mass Spectrometry		
	EPA-600/R-94-111	200.8	Determination of Trace Elements in Waters and Waste by Inductively Coupled Plasma
	HEIS	200.8_METALS_ICPMS	Determination of Trace Elements in Waters and Waste by Inductively Coupled Plasma, Mass Spec.
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, Volatiles

Group # WSCF102920

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 # WSCF102920

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-508-471 Determination Of Uranium, Plutonium, And Americium

HEIS	UISO_IE_PRECIP_AEA	Uranium Iso, Alpha Spec

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 Wet Chemistry

Group # WSCF102920

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-519-412	Total Residual Percent Solids Dried at 103 - 105 Degrees C		
	EPA-600/4-79-020	160.3	Total Residue
	Standard Methods	2540B	Total Solids Dried at 103-105 C
	HEIS	%SOLIDS	Dry Weight, Percent Solids

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102920

Sample # 102920003
SAF# F10-196
Sample ID B28301

Matrix SOIL
Sampled 11/10/10
Received 11/11/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**11/11/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UN	<1.5		mg/kg	1	1.5	10	11/11/10
Chloride	16887-00-6	LA-533-410	U	<2.1		mg/kg	1	2.1	20	11/11/10
Nitrite-N	NO2-N	LA-533-410	U	<0.90		mg/kg	1	0.90	5.0	11/11/10
Bromide	24959-67-9	LA-533-410	U	<2.2		mg/kg	1	2.2	25	11/11/10
Nitrate-N	NO3-N	LA-533-410	UN	<1.5		mg/kg	1	1.5	5.0	11/11/10
Phosphate-P	PO4-P	LA-533-410	UN	<3.5		mg/kg	1	3.5	20	11/11/10
Sulfate	14808-79-8	LA-533-410	U	<3.3		mg/kg	1	3.3	50	11/11/10
ICPMS Prep										**11/18/10**
ICP-MS										
Aluminum	7429-90-5	LA-505-412		151		mg/kg	1	5.0	100	11/19/10
Manganese	7439-96-5	LA-505-412		4.02		mg/kg	1	0.10	1.0	11/19/10
Nickel	7440-02-0	LA-505-412	U	<0.20		mg/kg	1	0.20	2.0	11/19/10
Silver	7440-22-4	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	11/19/10
Antimony	7440-36-0	LA-505-412	U	<0.30		mg/kg	1	0.30	3.0	11/19/10
Barium	7440-39-3	LA-505-412		2.10		mg/kg	1	0.20	2.0	11/19/10
Beryllium	7440-41-7	LA-505-412	U	<0.10		mg/kg	1	0.10	0.50	11/19/10
Cadmium	7440-43-9	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	11/19/10

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)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102920

Sample # 102920003
SAF# F10-196
Sample ID B28301

Matrix SOIL
Sampled 11/10/10
Received 11/11/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Chromium	7440-47-3	LA-505-412	U	<0.50		mg/kg	1	0.50	5.0	11/19/10
Cobalt	7440-48-4	LA-505-412	U	<0.10		mg/kg	1	0.10	0.50	11/19/10
Copper	7440-50-8	LA-505-412	B	0.124		mg/kg	1	0.10	1.0	11/19/10
Vanadium	7440-62-2	LA-505-412	B	0.349		mg/kg	1	0.20	2.0	11/19/10
Zinc	7440-66-6	LA-505-412	U	<0.80		mg/kg	1	0.80	5.0	11/19/10
Lead	7439-92-1	LA-505-412	B	0.215		mg/kg	1	0.10	1.0	11/19/10
Mercury	7439-97-6	LA-505-412	U	<0.050		mg/kg	1	0.050	0.20	11/19/10
Molybdenum	7439-98-7	LA-505-412	U	<0.10		mg/kg	1	0.10	1.0	11/19/10
Strontium	7440-24-6	LA-505-412	B	0.533		mg/kg	1	0.10	1.0	11/19/10
Thallium	7440-28-0	LA-505-412	U	<0.10		mg/kg	1	0.10	0.50	11/19/10
Tin	7440-31-5	LA-505-412	U	<0.10		mg/kg	1	0.10	0.50	11/19/10
Uranium	7440-61-1	LA-505-412	B	0.109		mg/kg	1	0.10	0.50	11/19/10
Arsenic	7440-38-2	LA-505-412	U	<0.40		mg/kg	1	0.40	4.0	11/19/10
Selenium	7782-49-2	LA-505-412	BC	0.319		mg/kg	1	0.30	3.0	11/19/10

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)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102920

Sample # 102920004
SAF# F10-196
Sample ID B28302

Matrix SOIL
Sampled 11/10/10
Received 11/11/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**11/11/10**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UN	<1.7		mg/kg	1	1.7	12	11/11/10
Chloride	16887-00-6	LA-533-410	B	2.61		mg/kg	1	2.5	23	11/11/10
Nitrite-N	NO2-N	LA-533-410	U	<1.0		mg/kg	1	1.0	5.8	11/11/10
Bromide	24959-67-9	LA-533-410	U	<2.6		mg/kg	1	2.6	29	11/11/10
Nitrate-N	NO3-N	LA-533-410	UN	<1.8		mg/kg	1	1.8	5.8	11/11/10
Phosphate-P	PO4-P	LA-533-410	UN	<4.0		mg/kg	1	4.0	23	11/11/10
Sulfate	14808-79-8	LA-533-410	B	10.2		mg/kg	1	3.8	58	11/11/10
ICPMS Prep										**11/18/10**
ICP-MS										
Aluminum	7429-90-5	LA-505-412		9130		mg/kg	1	5.8	120	11/19/10
Manganese	7439-96-5	LA-505-412		322		mg/kg	1	0.12	1.2	11/19/10
Nickel	7440-02-0	LA-505-412		10.9		mg/kg	1	0.23	2.3	11/19/10
Silver	7440-22-4	LA-505-412	U	<0.12		mg/kg	1	0.12	1.2	11/19/10
Antimony	7440-36-0	LA-505-412	U	<0.35		mg/kg	1	0.35	3.5	11/19/10
Barium	7440-39-3	LA-505-412		87.6		mg/kg	1	0.23	2.3	11/19/10
Beryllium	7440-41-7	LA-505-412	B	0.484		mg/kg	1	0.12	0.58	11/19/10
Cadmium	7440-43-9	LA-505-412	U	<0.12		mg/kg	1	0.12	1.2	11/19/10

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)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF102920

Sample # 102920004
SAF# F10-196
Sample ID B28302

Matrix SOIL
Sampled 11/10/10
Received 11/11/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Chromium	7440-47-3	LA-505-412		14.7		mg/kg	1	0.58	5.8	11/19/10
Cobalt	7440-48-4	LA-505-412		11.2		mg/kg	1	0.12	0.58	11/19/10
Copper	7440-50-8	LA-505-412		20.1		mg/kg	1	0.12	1.2	11/19/10
Vanadium	7440-62-2	LA-505-412		91.2		mg/kg	1	0.23	2.3	11/19/10
Zinc	7440-66-6	LA-505-412		51.9		mg/kg	1	0.93	5.8	11/19/10
Lead	7439-92-1	LA-505-412		4.68		mg/kg	1	0.12	1.2	11/19/10
Mercury	7439-97-6	LA-505-412	U	<0.058		mg/kg	1	0.058	0.23	11/19/10
Molybdenum	7439-98-7	LA-505-412	B	0.702		mg/kg	1	0.12	1.2	11/19/10
Strontium	7440-24-6	LA-505-412		29.4		mg/kg	1	0.12	1.2	11/19/10
Thallium	7440-28-0	LA-505-412	U	<0.12		mg/kg	1	0.12	0.58	11/19/10
Tin	7440-31-5	LA-505-412		0.606		mg/kg	1	0.12	0.58	11/19/10
Uranium	7440-61-1	LA-505-412		2.42		mg/kg	1	0.12	0.58	11/19/10
Arsenic	7440-38-2	LA-505-412	B	3.55		mg/kg	1	0.47	4.7	11/19/10
Selenium	7782-49-2	LA-505-412	BC	1.32		mg/kg	1	0.35	3.5	11/19/10

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)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF102920

Sample # 102920001
SAF# F10-196
Sample ID B282Y5

Matrix SOIL
Sampled 11/10/10
Received 11/11/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
8260 Prep										**11/12/10**
SW-846 8260B										
1,1-Dichloroethene	75-35-4	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Trichloroethene	79-01-6	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Benzene	71-43-2	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Toluene	108-88-3	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Chlorobenzene	108-90-7	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
1,1-Dichloroethane	75-34-3	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Ethylbenzene	100-41-4	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Styrene	100-42-5	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
cis-1,3-Dichloropropene	10061-01-5	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
trans-1,3-Dichloropropene	10061-02-6	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
1,2-Dichloroethane	107-06-2	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Methyl isobutyl ketone	108-10-1	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Dibromochloromethane	124-48-1	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Tetrachloroethene	127-18-4	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Total Xylenes	1330-20-7	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Total 1,2-Dichloroethene	540-59-0	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10

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 < 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)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF102920

Sample # 102920001
SAF# F10-196
Sample ID B282Y5

Matrix SOIL
Sampled 11/10/10
Received 11/11/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Carbon tetrachloride	56-23-5	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
2-Hexanone	591-78-6	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Acetone	67-64-1	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Chloroform	67-66-3	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
1,1,1-Trichloroethane	71-55-6	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Bromomethane	74-83-9	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Chloromethane	74-87-3	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Chloroethane	75-00-3	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Vinyl chloride	75-01-4	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Methylene chloride	75-09-2	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Carbon disulfide	75-15-0	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Bromoform	75-25-2	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Bromodichloromethane	75-27-4	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
1,2-Dichloropropane	78-87-5	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Methyl ethyl ketone	78-93-3	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
1,1,2-Trichloroethane	79-00-5	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
1,1,2,2-Tetrachloroethane	79-34-5	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
trans-1,2-Dichloroethene	156-60-5	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10

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 < 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)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF102920

Sample # 102920001
SAF# F10-196
Sample ID B282Y5

Matrix SOIL
Sampled 11/10/10
Received 11/11/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
cis-1,2-Dichloroethene	156-59-2	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10

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 < 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)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF102920

Sample # 102920002
SAF# F10-196
Sample ID B282Y6

Matrix SOIL
Sampled 11/10/10
Received 11/11/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
8260 Prep										**11/12/10**
SW-846 8260B										
1,1-Dichloroethene	75-35-4	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Trichloroethene	79-01-6	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Benzene	71-43-2	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Toluene	108-88-3	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Chlorobenzene	108-90-7	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
1,1-Dichloroethane	75-34-3	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Ethylbenzene	100-41-4	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Styrene	100-42-5	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
cis-1,3-Dichloropropene	10061-01-5	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
trans-1,3-Dichloropropene	10061-02-6	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
1,2-Dichloroethane	107-06-2	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Methyl isobutyl ketone	108-10-1	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Dibromochloromethane	124-48-1	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Tetrachloroethene	127-18-4	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Total Xylenes	1330-20-7	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Total 1,2-Dichloroethene	540-59-0	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10

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 < 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)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF102920

Sample # 102920002
SAF# F10-196
Sample ID B282Y6

Matrix SOIL
Sampled 11/10/10
Received 11/11/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Carbon tetrachloride	56-23-5	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
2-Hexanone	591-78-6	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Acetone	67-64-1	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Chloroform	67-66-3	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
1,1,1-Trichloroethane	71-55-6	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Bromomethane	74-83-9	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Chloromethane	74-87-3	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Chloroethane	75-00-3	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Vinyl chloride	75-01-4	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Methylene chloride	75-09-2	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Carbon disulfide	75-15-0	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Bromoform	75-25-2	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Bromodichloromethane	75-27-4	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
1,2-Dichloropropane	78-87-5	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
Methyl ethyl ketone	78-93-3	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
1,1,2-Trichloroethane	79-00-5	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
1,1,2,2-Tetrachloroethane	79-34-5	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10
trans-1,2-Dichloroethene	156-60-5	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10

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 < 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)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF102920

Sample # 102920002
SAF# F10-196
Sample ID B282Y6

Matrix SOIL
Sampled 11/10/10
Received 11/11/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
cis-1,2-Dichloroethene	156-59-2	LA-523-455	U	<1		ug/kg	1	1	6	11/13/10

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 < 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)

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102920

Sample # 102920003
SAF# F10-196
Sample ID B28301

Matrix SOIL
Sampled 11/10/10
Received 11/11/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Th/Pu/Am/U Teva										**12/09/10**
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.046	.022	pCi/g	1	0.012		12/15/10
Uranium-235	15117-96-1	LA-508-471		0.015	.012	pCi/g	1	0.014		12/15/10
Uranium-238	U-238	LA-508-471		0.036	.018	pCi/g	1	0.013		12/15/10

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
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.

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102920

Sample # 102920004
SAF# F10-196
Sample ID B28302

Matrix SOIL
Sampled 11/10/10
Received 11/11/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Th/Pu/Am/U Teva										**12/09/10**
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.97	.23	pCi/g	1	0.020		12/14/10
Uranium-235	15117-96-1	LA-508-471		0.058	.025	pCi/g	1	0.018		12/14/10
Uranium-238	U-238	LA-508-471		0.95	.22	pCi/g	1	0.020		12/14/10

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
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.

WSCF Analytical Results Report

Attention Michael Neely
Department Wet Chemistry

Group # WSCF102920

Sample # 102920001
SAF# F10-196
Sample ID B282Y5

Matrix SOIL
Sampled 11/10/10
Received 11/11/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Total Residue										**11/23/10**
Total Residue										
Percent Solids	%SOLIDS	LA-519-412		100		percent	1			11/23/10

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

B - Analyte < the RDL but >= the IDL/MDL.
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
N - MS and/or MSD sample recovery outside control limits.
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.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Wet Chemistry

Group # WSCF102920

Sample # 102920002
SAF# F10-196
Sample ID B282Y6

Matrix SOIL
Sampled 11/10/10
Received 11/11/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Total Residue										**11/23/10**
Total Residue										
Percent Solids	%SOLIDS	LA-519-412		79		percent	1			11/23/10

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

B - Analyte < the RDL but >= the IDL/MDL.
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
N - MS and/or MSD sample recovery outside control limits.
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.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Wet Chemistry

Group # WSCF102920

Sample # 102920003
SAF# F10-196
Sample ID B28301

Matrix SOIL
Sampled 11/10/10
Received 11/11/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Total Residue										**11/23/10**
Total Residue										
Percent Solids	%SOLIDS	LA-519-412		100		percent	1			11/23/10

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

B - Analyte < the RDL but >= the IDL/MDL.
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
N - MS and/or MSD sample recovery outside control limits.
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.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Wet Chemistry

Group # WSCF102920

Sample # 102920004
SAF# F10-196
Sample ID B28302

Matrix SOIL
Sampled 11/10/10
Received 11/11/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Total Residue										**11/23/10**
Total Residue										
Percent Solids	%SOLIDS	LA-519-412		86		percent	1			11/23/10

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

B - Analyte < the RDL but >= the IDL/MDL.
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
N - MS and/or MSD sample recovery outside control limits.
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.
PQL is equivalent to Estimated Quantitation Limit (EQL)

Quality Control Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF102920

QC Batch 169806
Associated Samples 102920001, 102920002

Test SW-846 8260B Volatiles, separate prep

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #41647**						
1,1-Dichloroethene	75-35-4		<1	ug/kg				U	11/12/10
Trichloroethene	79-01-6		<1	ug/kg				U	11/12/10
Benzene	71-43-2		<1	ug/kg				U	11/12/10
Toluene	108-88-3		<1	ug/kg				U	11/12/10
Chlorobenzene	108-90-7		<1	ug/kg				U	11/12/10
1,1-Dichloroethane	75-34-3		<1	ug/kg				U	11/12/10
Ethylbenzene	100-41-4		<1	ug/kg				U	11/12/10
Styrene	100-42-5		<1	ug/kg				U	11/12/10
cis-1,3-Dichloropropene	10061-01-5		<1	ug/kg				U	11/12/10
trans-1,3-Dichloropropene	10061-02-6		<1	ug/kg				U	11/12/10
1,2-Dichloroethane	107-06-2		<1	ug/kg				U	11/12/10
Methyl isobutyl ketone	108-10-1		<1	ug/kg				U	11/12/10
Dibromochloromethane	124-48-1		<1	ug/kg				U	11/12/10
Tetrachloroethene	127-18-4		<1	ug/kg				U	11/12/10
Total Xylenes	1330-20-7		<1	ug/kg				U	11/12/10
Total 1,2-Dichloroethene	540-59-0		<1	ug/kg				U	11/12/10
Carbon tetrachloride	56-23-5		<1	ug/kg				U	11/12/10

Quality Control Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF102920

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
2-Hexanone	591-78-6		<1	ug/kg					U	11/12/10
Acetone	67-64-1		<1	ug/kg					U	11/12/10
Chloroform	67-66-3		<1	ug/kg					U	11/12/10
1,1,1-Trichloroethane	71-55-6		<1	ug/kg					U	11/12/10
Bromomethane	74-83-9		<1	ug/kg					U	11/12/10
Chloromethane	74-87-3		<1	ug/kg					U	11/12/10
Chloroethane	75-00-3		<1	ug/kg					U	11/12/10
Vinyl chloride	75-01-4		<1	ug/kg					U	11/12/10
Methylene chloride	75-09-2		<1	ug/kg					U	11/12/10
Carbon disulfide	75-15-0		<1	ug/kg					U	11/12/10
Bromoform	75-25-2		<1	ug/kg					U	11/12/10
Bromodichloromethane	75-27-4		<1	ug/kg					U	11/12/10
1,2-Dichloropropane	78-87-5		<1	ug/kg					U	11/12/10
Methyl ethyl ketone	78-93-3		<1	ug/kg					U	11/12/10
1,1,2-Trichloroethane	79-00-5		<1	ug/kg					U	11/12/10
1,1,2,2-Tetrachloroethane	79-34-5		<1	ug/kg					U	11/12/10
trans-1,2-Dichloroethene	156-60-5		<1	ug/kg					U	11/12/10
cis-1,2-Dichloroethene	156-59-2		<1	ug/kg					U	11/12/10
LCS			**QC Sample #41648**							
1,1-Dichloroethene	75-35-4		28	ug/kg	113.3	50 - 131				11/13/10
Trichloroethene	79-01-6		25	ug/kg	101	66 - 119				11/13/10
Benzene	71-43-2		29	ug/kg	115	73 - 123				11/13/10

Quality Control Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF102920

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Toluene	108-88-3		30	ug/kg	118	77 - 128				11/13/10
Chlorobenzene	108-90-7		28	ug/kg	110.1	81 - 126				11/13/10
MS			**QC Sample #41649**							
			Original 102903010							
1,1-Dichloroethene	75-35-4		26	ug/kg	106.1	70 - 130				11/13/10
Trichloroethene	79-01-6		24	ug/kg	97.7	70 - 130				11/13/10
Benzene	71-43-2		29	ug/kg	117.6	70 - 130				11/13/10
Toluene	108-88-3		29	ug/kg	116.1	70 - 130				11/13/10
Chlorobenzene	108-90-7		27	ug/kg	108.3	70 - 130				11/13/10
MSD			**QC Sample #41650**							
			Original 102903010					**Paired**	**41649**	
1,1-Dichloroethene	75-35-4		27	ug/kg	110.3	70 - 130	3.90	30		11/13/10
Trichloroethene	79-01-6		25	ug/kg	101	70 - 130	3.30	30		11/13/10
Benzene	71-43-2		29	ug/kg	117.8	70 - 130	0.20	30		11/13/10
Toluene	108-88-3		29	ug/kg	118	70 - 130	1.60	30		11/13/10
Chlorobenzene	108-90-7		27	ug/kg	109.6	70 - 130	1.20	30		11/13/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102920

QC Batch 169842
Associated Samples 102920003, 102920004

Test Anions by Ion Chromatography (Solid)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #41755**							
Fluoride	16984-48-8		<0.044	ug/mL					U	11/11/10
Chloride	16887-00-6		<0.042	ug/mL					U	11/11/10
Nitrite-N	NO2-N		<0.018	ug/mL					U	11/11/10
Bromide	24959-67-9		<0.054	ug/mL					U	11/11/10
Nitrate-N	NO3-N		<9.7E-3	ug/mL					U	11/11/10
Phosphate-P	PO4-P		<0.072	ug/mL					U	11/11/10
Sulfate	14808-79-8		<0.083	ug/mL					U	11/11/10
LCS			**QC Sample #41756**							
Fluoride	16984-48-8		0.916	ug/mL	92.5	90 - 110				11/11/10
Chloride	16887-00-6		1.79	ug/mL	90.3	90 - 110				11/11/10
Nitrite-N	NO2-N		0.964	ug/mL	98.6	90 - 110				11/11/10
Bromide	24959-67-9		3.83	ug/mL	97.7	90 - 110				11/11/10
Nitrate-N	NO3-N		0.884	ug/mL	99.9	90 - 110				11/11/10
Phosphate-P	PO4-P		1.81	ug/mL	94.9	90 - 110				11/11/10
Sulfate	14808-79-8		3.58	ug/mL	91.4	90 - 110				11/11/10
MS			**QC Sample #41757**							
			Original 102903017							
Fluoride	16984-48-8		16.4	mg/kg	65.2	80 - 120			N	11/11/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102920

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
Chloride	16887-00-6		44.1	mg/kg	87.5	80 - 120					11/11/10
Nitrite-N	NO2-N		24.1	mg/kg	96.6	80 - 120					11/11/10
Bromide	24959-67-9		96.2	mg/kg	96.3	80 - 120					11/11/10
Nitrate-N	NO3-N		27.6	mg/kg	122.6	80 - 120				N	11/11/10
Phosphate-P	PO4-P		39.2	mg/kg	80.4	80 - 120					11/11/10
Sulfate	14808-79-8		89.4	mg/kg	89.5	80 - 120					11/11/10
MSD			**QC Sample #41758**								
			Original 102903017						**Paired**	**41757**	
Fluoride	16984-48-8		16.9	mg/kg	67.8	80 - 120	3.90	30		N	11/11/10
Chloride	16887-00-6		45.6	mg/kg	91.4	80 - 120	4.40	30			11/11/10
Nitrite-N	NO2-N		24.5	mg/kg	99.3	80 - 120	2.80	30			11/11/10
Bromide	24959-67-9		97.7	mg/kg	98.8	80 - 120	2.60	30			11/11/10
Nitrate-N	NO3-N		28.0	mg/kg	125.3	80 - 120	2.20	30		N	11/11/10
Phosphate-P	PO4-P		38.1	mg/kg	78.9	80 - 120	1.90	30		N	11/11/10
Sulfate	14808-79-8		91.8	mg/kg	92.8	80 - 120	3.60	30			11/11/10
DUP			**QC Sample #41759**								
			Original 102903017								
Fluoride	16984-48-8		0.00	mg/kg			0.00	30		B	11/11/10
Chloride	16887-00-6		2.07	mg/kg			45.10	30	*	BX	11/11/10
Nitrite-N	NO2-N		0.00	mg/kg			0.00	30		B	11/11/10
Bromide	24959-67-9		0.00	mg/kg			0.00	30		B	11/11/10
Nitrate-N	NO3-N		5.39	mg/kg			4.30	30			11/11/10
Phosphate-P	PO4-P		3.94	mg/kg			9.10	30		B	11/11/10
Sulfate	14808-79-8		12.3	mg/kg			0.80	30		B	11/11/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102920

QC Batch 170023
Associated Samples 102920003, 102920004

Test ICP-2008 MS All possible metal

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #42189**						
Aluminum	7429-90-5		<5.0	ug/L				U	11/19/10
Manganese	7439-96-5		<0.10	ug/L				U	11/19/10
Nickel	7440-02-0		<0.20	ug/L				U	11/19/10
Silver	7440-22-4		<0.10	ug/L				U	11/19/10
Antimony	7440-36-0		<0.30	ug/L				U	11/19/10
Barium	7440-39-3		<0.20	ug/L				U	11/19/10
Beryllium	7440-41-7		<0.10	ug/L				U	11/19/10
Cadmium	7440-43-9		<0.10	ug/L				U	11/19/10
Chromium	7440-47-3		<0.50	ug/L				U	11/19/10
Cobalt	7440-48-4		<0.050	ug/L				U	11/19/10
Copper	7440-50-8		<0.10	ug/L				U	11/19/10
Vanadium	7440-62-2		<0.20	ug/L				U	11/19/10
Zinc	7440-66-6		<0.80	ug/L				U	11/19/10
Lead	7439-92-1		<0.10	ug/L				U	11/19/10
Mercury	7439-97-6		<0.050	ug/L				U	11/19/10
Molybdenum	7439-98-7		<0.050	ug/L				U	11/19/10
Strontium	7440-24-6		<0.10	ug/L				U	11/19/10
Thallium	7440-28-0		<0.050	ug/L				U	11/19/10
Tin	7440-31-5		<0.050	ug/L				U	11/19/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102920

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Uranium	7440-61-1		<0.050	ug/L					U	11/19/10
Arsenic	7440-38-2		<0.40	ug/L					U	11/19/10
Selenium	7782-49-2		0.568	ug/L					B	11/19/10
LCS			**QC Sample #42190**							
Aluminum	7429-90-5		7850	mg/kg	95	49 - 124				11/19/10
Manganese	7439-96-5		479	mg/kg	105.8	75 - 121				11/19/10
Nickel	7440-02-0		57.3	mg/kg	103	74 - 122				11/19/10
Silver	7440-22-4		110	mg/kg	108.4	83 - 127				11/19/10
Antimony	7440-36-0		151	mg/kg	167.1	62 - 205				11/19/10
Barium	7440-39-3		328	mg/kg	102.9	78 - 118				11/19/10
Beryllium	7440-41-7		91.1	mg/kg	101.8	77 - 120				11/19/10
Cadmium	7440-43-9		74.7	mg/kg	112.3	76 - 129				11/19/10
Chromium	7440-47-3		75.6	mg/kg	103.7	68 - 119				11/19/10
Cobalt	7440-48-4		77.7	mg/kg	106.3	77 - 122				11/19/10
Copper	7440-50-8		65.9	mg/kg	96.2	67 - 120				11/19/10
Vanadium	7440-62-2		86.5	mg/kg	104.2	67 - 122				11/19/10
Zinc	7440-66-6		180	mg/kg	101.5	73 - 131				11/19/10
Lead	7439-92-1		134	mg/kg	103.2	79 - 124				11/19/10
Mercury	7439-97-6		8.09	mg/kg	97.5	69 - 124				11/19/10
Molybdenum	7439-98-7		53.1	mg/kg	109	80 - 125				11/19/10
Strontium	7440-24-6		58.4	mg/kg	107.3	78 - 119				11/19/10
Thallium	7440-28-0		141	mg/kg	106.2	52 - 137				11/19/10
Tin	7440-31-5		186	mg/kg	107.6	84 - 130				11/19/10
Uranium	7440-61-1		383	mg/kg	95.7	86 - 113				11/19/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102920

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Arsenic	7440-38-2		138	mg/kg	104.2	79 - 125				11/19/10
Selenium	7782-49-2		176	mg/kg	109.2	82 - 133				11/19/10
MS			**QC Sample #42191**							
			Original 102920003							
Aluminum	7429-90-5	151	1300	mg/kg	129.8	70 - 130				11/19/10
Manganese	7439-96-5	4.02	109	mg/kg	109.2	70 - 130				11/19/10
Nickel	7440-02-0	<0.20	98.9	mg/kg	98.9	70 - 130				11/19/10
Silver	7440-22-4	<0.10	97.2	mg/kg	97.2	70 - 130				11/19/10
Antimony	7440-36-0	<0.30	98.2	mg/kg	98.2	70 - 130				11/19/10
Barium	7440-39-3	2.10	100	mg/kg	100.1	70 - 130				11/19/10
Beryllium	7440-41-7	<0.10	101	mg/kg	101.2	70 - 130				11/19/10
Cadmium	7440-43-9	<0.10	98.3	mg/kg	98.3	70 - 130				11/19/10
Chromium	7440-47-3	<0.50	104	mg/kg	103.9	70 - 130				11/19/10
Cobalt	7440-48-4	<0.10	102	mg/kg	102.2	70 - 130				11/19/10
Copper	7440-50-8	0.124	100	mg/kg	100.3	70 - 130				11/19/10
Vanadium	7440-62-2	0.349	104	mg/kg	104.3	70 - 130				11/19/10
Zinc	7440-66-6	<0.80	105	mg/kg	105	70 - 130				11/19/10
Lead	7439-92-1	0.215	97.9	mg/kg	97.9	70 - 130				11/19/10
Mercury	7439-97-6	<0.050	1.98	mg/kg	99	70 - 130				11/19/10
Molybdenum	7439-98-7	<0.10	97.7	mg/kg	97.7	70 - 130				11/19/10
Strontium	7440-24-6	0.533	103	mg/kg	102.6	70 - 130				11/19/10
Thallium	7440-28-0	<0.10	96.6	mg/kg	96.6	70 - 130				11/19/10
Tin	7440-31-5	<0.10	98.9	mg/kg	98.9	70 - 130				11/19/10
Uranium	7440-61-1	0.109	96.7	mg/kg	96.7	70 - 130				11/19/10
Arsenic	7440-38-2	<0.40	100	mg/kg	100.4	70 - 130				11/19/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF102920

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Selenium	7782-49-2	0.319	99.1	mg/kg	99.1	70 - 130				11/19/10
MSD			**QC Sample #42192**							
			Original 102920003						**Paired 42191**	
Aluminum	7429-90-5	151	1110	mg/kg	110.9	70 - 130	15.70	30		11/19/10
Manganese	7439-96-5	4.02	101	mg/kg	101.1	70 - 130	7.70	30		11/19/10
Nickel	7440-02-0	<0.20	102	mg/kg	101.5	70 - 130	2.60	30		11/19/10
Silver	7440-22-4	<0.10	96.2	mg/kg	96.2	70 - 130	1.00	30		11/19/10
Antimony	7440-36-0	<0.30	97.5	mg/kg	97.5	70 - 130	0.70	30		11/19/10
Barium	7440-39-3	2.10	98.8	mg/kg	98.8	70 - 130	1.30	30		11/19/10
Beryllium	7440-41-7	<0.10	101	mg/kg	100.8	70 - 130	0.40	30		11/19/10
Cadmium	7440-43-9	<0.10	97.6	mg/kg	97.6	70 - 130	0.70	30		11/19/10
Chromium	7440-47-3	<0.50	103	mg/kg	102.8	70 - 130	1.10	30		11/19/10
Cobalt	7440-48-4	<0.10	101	mg/kg	101	70 - 130	1.20	30		11/19/10
Copper	7440-50-8	0.124	99.2	mg/kg	99.2	70 - 130	1.10	30		11/19/10
Vanadium	7440-62-2	0.349	101	mg/kg	100.9	70 - 130	3.30	30		11/19/10
Zinc	7440-66-6	<0.80	99.6	mg/kg	99.6	70 - 130	5.30	30		11/19/10
Lead	7439-92-1	0.215	96.8	mg/kg	96.8	70 - 130	1.10	30		11/19/10
Mercury	7439-97-6	<0.050	1.86	mg/kg	93	70 - 130	6.20	30		11/19/10
Molybdenum	7439-98-7	<0.10	96.3	mg/kg	96.3	70 - 130	1.40	30		11/19/10
Strontium	7440-24-6	0.533	102	mg/kg	102	70 - 130	0.60	30		11/19/10
Thallium	7440-28-0	<0.10	95.9	mg/kg	95.9	70 - 130	0.70	30		11/19/10
Tin	7440-31-5	<0.10	97.7	mg/kg	97.7	70 - 130	1.20	30		11/19/10
Uranium	7440-61-1	0.109	96.0	mg/kg	96	70 - 130	0.70	30		11/19/10
Arsenic	7440-38-2	<0.40	99.5	mg/kg	99.5	70 - 130	0.90	30		11/19/10
Selenium	7782-49-2	0.319	97.8	mg/kg	97.8	70 - 130	1.30	30		11/19/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102920

QC Batch 170514
Associated Samples 102920003, 102920004

Test Uranium (AEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #42979**								
Uranium-234	U-233/234		3.8E-3	pCi/g						U	12/14/10
Uranium-235	15117-96-1		1.9E-3	pCi/g						U	12/14/10
Uranium-238	U-238		5.7E-3	pCi/g						U	12/14/10
LCS			**QC Sample #42980**								
Uranium-234	U-233/234		8.4	pCi/sample	102.8	80 - 120					12/14/10
DUP			**QC Sample #42981**								
			Original 102920003								
Uranium-234	U-233/234	0.046	0.037	pCi/g			21.70	30			12/14/10
Uranium-235	15117-96-1	0.015	1.9E-3	pCi/g			155.00	30	*	U	12/14/10
Uranium-238	U-238	0.036	0.028	pCi/g			25.00	30			12/14/10

Quality Control Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF102920

QC Batch 169806
Associated Samples 102920001, 102920002

Test SW-846 8260B Volatiles, separate prep

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102920001**							
1,2-Dichloroethane-d4	17060-07-0				109.6	77 - 137				11/13/10
Toluene-d8	2037-26-5				96.9	78 - 122				11/13/10
4-Bromofluorobenzene	460-00-4				91.5	66 - 125				11/13/10
SAMPLE			**Sample #102920002**							
1,2-Dichloroethane-d4	17060-07-0				105.9	77 - 137				11/13/10
Toluene-d8	2037-26-5				96	78 - 122				11/13/10
4-Bromofluorobenzene	460-00-4				85.7	66 - 125				11/13/10
BLANK			**QC Sample #41647**							
1,2-Dichloroethane-d4	17060-07-0				100.3	77 - 137				11/12/10
Toluene-d8	2037-26-5				93.6	78 - 122				11/12/10
4-Bromofluorobenzene	460-00-4				91.4	66 - 125				11/12/10
LCS			**QC Sample #41648**							
1,2-Dichloroethane-d4	17060-07-0				102.8	77 - 137				11/13/10
Toluene-d8	2037-26-5				92.9	78 - 122				11/13/10

Quality Control Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF102920

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
4-Bromofluorobenzene	460-00-4				90.3	66 - 125				11/13/10
MS			**QC Sample #41649**							
			Original	**102903010**						
1,2-Dichloroethane-d4	17060-07-0				108.7	77 - 137				11/13/10
Toluene-d8	2037-26-5				93.4	78 - 122				11/13/10
4-Bromofluorobenzene	460-00-4				86.6	66 - 125				11/13/10
MSD			**QC Sample #41650**							
			Original	**102903010**				**Paired**	**41649**	
1,2-Dichloroethane-d4	17060-07-0				107	77 - 137	1.60	30		11/13/10
Toluene-d8	2037-26-5				93.1	78 - 122	0.30	30		11/13/10
4-Bromofluorobenzene	460-00-4				85.4	66 - 125	1.40	30		11/13/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF102920

QC Batch 170514
Associated Samples 102920003, 102920004

Test Uranium (AEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #102920003**							
Uranium-232 Tracer	14158-29-3				83.4	25 - 105				12/15/10
SAMPLE			**Sample #102920004**							
Uranium-232 Tracer	14158-29-3				90.8	25 - 105				12/14/10
BLANK			**QC Sample #42979**							
Uranium-232 Tracer	14158-29-3				85.5	25 - 105				12/14/10
LCS			**QC Sample #42980**							
Uranium-232 Tracer	14158-29-3				63.2	25 - 105				12/14/10
DUP			**QC Sample #42981**							
			Original 102920003							
Uranium-232 Tracer	14158-29-3				85.3	25 - 105	2.80			12/14/10

Analytical Comment Report

Attention: Michael Neely

Group # WSCF102920

Quality Control Comments

Department Inorganic

41759 B297H5(102903017DUP)

Analyte Chloride - Anions by Ion Chromatography (Solid)

[1] Duplicate is flagged for RPD out-of-limits. RPD does not apply to samples concentrations below the calibration range. RPD is calculated on measured values and not applicable for a result below the RDL.

ATTACHMENT4

SAMPLE RECEIPT

Consisting of 8 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 650 S3-30
Richland, WA 99352

ATTN: Michael Neely

Customer Code: CHPRC
PO #: 401980
Work Order #: 102920
Profile #: F10-196-105
Proj. Mgr.:
Phone:

The following samples were received from you on 11/11/2010 9:20:00 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		
102920001	B282Y5	SOIL	11/10/2010 11:15	11/11/2010 09:20
		8260V-S; DRY-WEIGHT		
102920002	B282Y6	SOIL	11/10/2010 12:00	11/11/2010 09:20
		8260V-S; DRY-WEIGHT		
102920003	B28301	SOIL	11/10/2010 11:15	11/11/2010 09:20
		2008-S; AEA-U-S; DRY-WEIGHT; IC-S		
102920004	B28302	SOIL	11/10/2010 12:00	11/11/2010 09:20
		2008-S; AEA-U-S; DRY-WEIGHT; IC-S		

Test Acronym Description

Test Acronym	Description
2008-S	ICP-MS (S)
8260V-S	Volatiles by 8260B (S)
AEA-U-S	Uranium Isotopic (AEA) (S)
DRY-WEIGHT	Dry Weight as Pct Moisture
IC-S	Anions by IC (S)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-196-105

PAGE 1 OF 1

COLLECTOR: Rosario Rosa Kaur Higuera

SAMPLING LOCATION: C7653 (399-1-54); I-018EB

ICE CHEST NO.: N/A

SHIPPED TO: Waste Sampling & Characterization

COMPANY CONTACT: DYEKMAN, DL

TELEPHONE NO.: 373-2530

PROJECT DESIGNATION: 300 Area Remedial Investigation/Feasibility Analysis - 300-FF-5 Soils

FIELD LOGBOOK NO.: HNF-N 503-2 P354

ACTUAL SAMPLE DEPTH: N/A

OFFSITE PROPERTY NO.: N/A

PROJECT COORDINATOR: DYEKMAN, DL

SAF NO.: F10-196

COA: 300204ES10

BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8N

AIR QUALITY: ☐

DATA TURNAROUND: 45 Days / 45 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

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)

102920

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool <-7C and >-20C
HOLDING TIME	14 Days
TYPE OF CONTAINER	aGs
NO. OF CONTAINER(S)	5
VOLUME	40mL
SAMPLE ANALYSIS	VOA - 5035/8260 (LOW LEVEL 300 Area HPNS)

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME	
B282Y5	1	SOIL	11-10-10	1115	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosario Larry Rosario 11-10-1	1600	SSU-F1 NOV 10 2010	1600
SSU-F1	11-11-10 0900	CW Distribution	11-11-10 0900
CW Distribution B NOV 11 2010	0920	M N Gibson MNG NOV 11 2010	0920

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 401980.☐** The 300 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐☐** The laboratory is to report all TICs for Method 8260.

☐ ORIGINAL

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

A-6003-618(01/06)

Chain of Custody

SAMPLE RECORD SHEET FOR VOC SAMPLE COLLECTION

Location: C 7653 I-018EB WSCF

Sampler Initials and Date: JAR - 11-10-10

Sample Number [1]	Sample Suffix	Initial Weight [2] (grams)	Total Weight [3] (grams)	Soil Weight [4] (grams)
B282Y5	K	29.1	33.5	4.4
B282Y5	L	29.5	33.4	3.9
B282Y5	M	29.2	33.5	4.3
B282Y5	N	29.2	33.6	4.4
B282Y5	P	30.8	35.2	4.4

[1] Enter sample number associated with the sampling event

[2] Initial weight is to include all labels, stickers, bags, spin bars (for samples with suffix K, L, M, N and P) and anything else that will be associated with the bottle when it is weighed with the sample.

[3] Ensure that everything weighed for the empty bottle and no additional items (besides the sample) is weighed

[4] Soil weight is the vial with sample minus Initial Weight

A 6005-326 (REV 0)

Scale S/N 712916272 G Cal FEB 16 2011

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-196-102	PAGE 1 OF 1
COLLECTOR: Restine Rost Kaur Hogan	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days
SAMPLING LOCATION: C7653 (399-1-54), 1-016	PROJECT DESIGNATION: 300 Area Remedial Investigation/Feasibility Analysis - 300-FF-5 Soils		SAP NO.: F10-196	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-503-2 pg 54	ACTUAL SAMPLE DEPTH: 36.0 - 38.5	COA: 300204E510	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Waste Sampling & Characterization	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, SD=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	Cool <-10C and >-20C
HOLDING TIME	14 Days
TYPE OF CONTAINER	Jar
NO. OF CONTAINER(S)	5
VOLUME	40ml.
SAMPLE ANALYSIS	VOA SEMI-VOA HOW LEVEL 300 Area RMPD

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME
B28ZY6	2	SOL	11-10-10	1200

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: Larry Lewis Larry Lewis	DATE/TIME: 11-10-10 1600	RECEIVED BY/STORED IN: SSU-F1 NOV 10 2010	DATE/TIME: 1600
RELINQUISHED BY/REMOVED FROM: SSU-F1	DATE/TIME: 11-11-10 0900	RECEIVED BY/STORED IN: DW Brouillard	DATE/TIME: 11-11-10 0900
RELINQUISHED BY/REMOVED FROM: DW Brouillard	DATE/TIME: NOV 11 2010	RECEIVED BY/STORED IN: John Nelson Moles	DATE/TIME: NOV 11 2010 0900
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

** The CACN for WSCF Analytical is 401980.☐** The 300 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐☐** The laboratory is to report all TICs for Method 8260.

☐ ORIGINAL

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

A-6003-618(01/06)

Chain of Custody

SAMPLE RECORD SHEET FOR VOC SAMPLE COLLECTION

Location: C7653 I-018 WSCF

Sampler Initials and Date: YAR - 11-10-10

Sample Number [1]	Sample Suffix	Initial Weight [2] (grams)	Total Weight [3] (grams)	Soil Weight [4] (grams)
B282Y6	K	29.1	34.1	5.0
B282Y6	L	29.2	35.3	6.1
B282Y6	M	29.1	35.2	6.1
B282Y6	N	29.1	34.8	5.7
B282Y6	P	29.4	35.8	6.4

[1] Enter sample number associated with the sampling event.

[2] Initial weight is to include all labels, stickers, bags, spin bars (for samples with suffix K, L, M, N and P) and anything else that will be associated with the bottle when it is weighed with the sample.

[3] Ensure that everything weighed for the empty bottle and no additional items (besides the sample) is weighed

[4] Soil weight is the vial with sample minus Initial Weight

A-6005-526 (REV 0)

Scale S/N 7129162726 Cal FEB 16 2011

Thursday, November 11, 2010 11:48:04 AM

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ChemVare

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-196-106 | PAGE 1 OF 1

COLLECTOR: Rosine Rost Kenn Higuera	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days		
SAMPLING LOCATION: C7653 (399-1-54); 1-018E8	PROJECT DESIGNATION: 300 Area Remedial Investigation/Feasibility Analysis - 300-FF-5 Soils		SAP NO.: F10-196
AIR QUALITY: ☐			
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-503-2 Pg 54	ACTUAL SAMPLE DEPTH: N/A	COA: 3002HES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

MATRIX*: A=Air, DL=Drum Liquid, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SF=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	Cool=4C	Cool=4C	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	120mL	60mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	IC Anions - 300.0 (300 Area RI/FS)	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B23301 3	SOIL	11-10-10	1115	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosine Larry Rosine	11-10-10 1600	SSU-R4	NOV 10 2010 1600
SSU-R4	NOV 11 2010 0900	DW Brotherton	NOV 11 2010 0900
DW Brotherton	NOV 11 2010 0920	M Nelson	NOV 11 2010 0920

SPECIAL INSTRUCTIONS

*** The CACN for WSCF Analytical is 401980.☐** The 300 Area S&GRP Characterization and Monitoring Sampling and Analysis GKJ applies to this SAF.

(1) ICP/MS - 200.8 (300 Area RI/FS); ICP/MS - 200.8 (Add-on 300 Area RI/FS) {Uranium}; 200.8_HG - ICPMS (300 Area RI/FS) {Mercury};

(2) Isotopic Uranium {Uranium-233/234, Uranium-235, Uranium-238};

☐ CACN

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION: DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6002-618(01/06)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F10-196-103 | PAGE 1 OF 1

COLLECTOR: Rosane Rust Kaen Higuera

SAMPLING LOCATION: C7653 (300-1-54); 1-018

ICE CHEST NO.: N/A

SHIPPED TO: Waste Sampling & Characterization

COMPANY CONTACT: DYEKMAN, DL

TELEPHONE NO.: 373-2530

PROJECT DESIGNATION: 300 Area Remedial Investigation/Feasibility Analysis - 300-FF-5 Soils

FIELD LOGBOOK NO.: HNF-N-503-2 P3 59

ACTUAL SAMPLE DEPTH: 3.0 - 3.5

OFFSITE PROPERTY NO.: N/A

PROJECT COORDINATOR: DYEKMAN, DL

SAF NO.: F10-196

COA: 300204ES10

BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: SN

AIR QUALITY: ☐

DATA TURNAROUND: 45 Days / 45 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

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	Cool-4C	Cool-4C	None
HOLDING TIME	6 Months	28 Days/48 Hours	6 Months
TYPE OF CONTAINER	G/P	G/P	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	120mL	60mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	IC Anions 300.0 (300 Area RI/FS);	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME			
B28302	4	SOIL	11-10-10	1200	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rasmussen Larry Rasmussen	11-10-10 1600	BSU-R4	NOV 10 2010 1600
SSU-R4	NOV 11 2010 09:00	DW Brouwerton	NOV 11 2010 09:00
DW Brouwerton	NOV 11 2010 9:20	M. Nelson	NOV 11 2010 09:20

SPECIAL INSTRUCTIONS

** The CACN for WSCF Analytical is 401980.☐** The 300 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1) ICP/MS - 200.8 (300 Area RI/FS); ICP/MS - 200.8 (Add-on 300 Area RI/FS) {Uranium}; 200.8_HG - ICPMS (300 Area RI/FS) {Mercury};
(2) Isotopic Uranium {Uranium-233/234, Uranium-235, Uranium-238};

D OK

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION: DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)