WSCF Laboratory

PO Box 650 S3-30
Richland, WA 99352

RECEIVED DECEMBER 08, 2010

0096266

December 7, 2010

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

Dear Michael Neely,

FINAL RESULT FOR SAMPLE DELIVERY GROUP WSCF103062

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 WSCF103062

* 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 # WSCF103062
Data Deliverable Date 12/07/10

SAF #	Sample ID	Sample #	Matrix	Sampled	Received
F11-013	B29B37	103062001	SOIL	11/18/10	11/18/10
F11-013	B29B38	103062002	SOIL	11/18/10	11/18/10
F11-013	B29B39	103062003	SOIL	11/18/10	11/18/10
F11-013	B29B40	103062004	SOIL	11/18/10	11/18/10
F11-013	B29B41	103062005	SOIL	11/18/10	11/18/10
F11-013	B29B42	103062006	SOIL	11/18/10	11/18/10
F11-013	B29B43	103062007	SOIL	11/18/10	11/18/10
F11-013	B29B44	103062008	SOIL	11/18/10	11/18/10
F11-013	B29B45	103062009	SOIL	11/18/10	11/18/10
F11-013	B29B46	103062010	SOIL	11/18/10	11/18/10
F11-013	B29B47	103062011	SOIL	11/18/10	11/18/10
F11-013	B29B48	103062012	SOIL	11/18/10	11/18/10
F11-013	B29B49	103062013	SOIL	11/18/10	11/18/10

ATTACHMENT 2

NARRATIVE

Consisting of 5 pages
Including cover page

Attachment 2
Narrative
WSCF103062

Introduction

Thirteen (13) S&GRP sample was received at the WSCF Laboratory on November 18, 2010. 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.

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

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

- Batch QC 170517 analyzed on sample# B29B37 (103062001)
  - Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.

- Matrix Spike recovery was outside established laboratory limits. Affected sample results in this batch were "N" flagged.

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 170120 analyzed on sample# B29B37 (103062001)
  - Barium – Matrix Spike recovery was outside established laboratory limits. Affected sample results in this batch were "N" flagged.
  - Manganese – exceeded spiking levels by a factor of 4. Spike recoveries and associated RPDs are not valid.

All other applicable QC controls are within the established limits.

Organic Comments

PCB – 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 170446 analyzed on sample# B29B37 (103062001)

All QC controls are within the established limits.

Radiochemistry Comments

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

Tracers are used to determine chemical yield. RPD is monitored in sample duplicate and is not required for tracer recovery per SOW.

- Gamma Energy Analysis:
  - Batch QC 170075 analyzed on sample# B29D58 (103070010)
    - Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.
  - Batch QC 170076 analyzed on sample# B29B44 (103062008)

- Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.

All other QC controls are within the established limits.

- Technetium-99:
  - Batch QC 170170 analyzed on sample# B29B37 (103062001)
  - Batch QC 170171 analyzed on sample# B29B45 (103062009)

All QC controls are within the established limits.

- Americium-241:
  - Batch QC 170342 analyzed on sample# B29B37 (103062001)
  - Batch QC 170343 analyzed on sample# B29B44 (103062008)

All QC controls are within the established limits.

- Plutonium analysis:
  - Batch QC 170342 analyzed on sample# B29B37 (103062001)
    - Plutonium-238 - The Blank is less than two times the MDC. "B" Flag not required.
    - Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.
  - Batch QC 170343 analyzed on sample# B29B44 (103062008)
    - Plutonium-239/240 - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results below 5X the minimum detectable activity. No flags issued.

All other QC controls are within the established limits.

- Isotopic Uranium analysis:
  - Batch QC 170342 analyzed on sample# B29B37 (103062001)
    - Uranium-234 - The Blank is less than two times the MDC. "B" Flag not required.

- Uranium-235, and Uranium-238 - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results below 5X the minimum detectable activity. No flags issued.

- Batch QC 170343 analyzed on sample# B29B44 (103062008)
  - Uranium-234 - Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits due to the heterogeneous nature of the sample. No flags issued.

All other QC controls are within the established limits.

- Strontium-89/90:
  - Batch QC 170130 analyzed on sample# B29B37 (103062001)
    - The LCS recovery was low but within the 70 – 130% range allowed in the SOW.
  - Batch QC 170131 analyzed on sample# B29B44 (103062008)

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 3

ANALYTICAL RESULTS

Consisting of 108 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 #	WSCF103062
Report Date	December 7, 2010

Analytical: Electronically signed by Joseph Hale

Client Services: Electronically signed by Marisol Avila

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 # WSCF103062

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
170120	170121	4	BLANK	42457	BLANK		ICP-2008 MS All possible metal
170120	170121	5	LCS	42458	LCS		ICP-2008 MS All possible metal
170120	170121	6	MS	42459	B29B37(103062001MS)	103062001	ICP-2008 MS All possible metal
170120	170121	7	MSD	42460	B29B37(103062001MSD)	103062001	ICP-2008 MS All possible metal
170120	170121	8	SAMPLE	103062001	B29B37		ICP-2008 MS All possible metal
170120	170121	9	SAMPLE	103062002	B29B38		ICP-2008 MS All possible metal
170120	170121	10	SAMPLE	103062003	B29B39		ICP-2008 MS All possible metal
170120	170121	11	SAMPLE	103062004	B29B40		ICP-2008 MS All possible metal
170120	170121	12	SAMPLE	103062005	B29B41		ICP-2008 MS All possible metal
170120	170121	13	SAMPLE	103062006	B29B42		ICP-2008 MS All possible metal
170120	170121	16	SAMPLE	103062007	B29B43		ICP-2008 MS All possible metal
170120	170121	17	SAMPLE	103062008	B29B44		ICP-2008 MS All possible metal
170120	170121	18	SAMPLE	103062009	B29B45		ICP-2008 MS All possible metal
170120	170121	19	SAMPLE	103062010	B29B46		ICP-2008 MS All possible metal
170120	170121	20	SAMPLE	103062011	B29B47		ICP-2008 MS All possible metal
170120	170121	21	SAMPLE	103062012	B29B48		ICP-2008 MS All possible metal
170120	170121	22	SAMPLE	103062013	B29B49		ICP-2008 MS All possible metal
170517	170561	1	BLANK	42985	BLANK		Hexavalent chromium
170517	170561	6	LCS	42986	LCS		Hexavalent chromium
170517	170561	7	DUP	42987	B29B37(103062001DUP)	103062001	Hexavalent chromium
170517	170561	8	MS	42988	B29B37(103062001MS)	103062001	Hexavalent chromium
170517	170561	9	PSTSPK	42989	PSTSPK		Hexavalent chromium
170517	170561	10	IMS	42990	B29B37(103062001IMS)	103062001	Hexavalent chromium

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF103062

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
170517	170561	11	SAMPLE	103062001	B29B37		Hexavalent chromium
170517	170561	12	SAMPLE	103062002	B29B38		Hexavalent chromium
170517	170561	13	SAMPLE	103062003	B29B39		Hexavalent chromium
170517	170561	14	SAMPLE	103062004	B29B40		Hexavalent chromium
170517	170561	15	SAMPLE	103062005	B29B41		Hexavalent chromium
170517	170561	16	SAMPLE	103062006	B29B42		Hexavalent chromium
170517	170561	17	SAMPLE	103062007	B29B43		Hexavalent chromium
170517	170561	18	SAMPLE	103062008	B29B44		Hexavalent chromium
170517	170561	19	SAMPLE	103062009	B29B45		Hexavalent chromium
170517	170561	20	SAMPLE	103062010	B29B46		Hexavalent chromium
170517	170561	21	SAMPLE	103062011	B29B47		Hexavalent chromium
170517	170561	22	SAMPLE	103062012	B29B48		Hexavalent chromium
170517	170561	23	SAMPLE	103062013	B29B49		Hexavalent chromium

Batch QC List

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF103062

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
170446	170555	1	BLANK	42823	BLANK		PCBs by EPA SW-846 Method 8082
170446	170555	2	LCS	42824	LCS		PCBs by EPA SW-846 Method 8082
170446	170555	3	MS	42825	B29B37(103062001MS)	103062001	PCBs by EPA SW-846 Method 8082
170446	170555	4	MSD	42826	B29B37(103062001MSD)	103062001	PCBs by EPA SW-846 Method 8082
170446	170555	5	SAMPLE	103062001	B29B37		PCBs by EPA SW-846 Method 8082
170446	170555	6	SAMPLE	103062002	B29B38		PCBs by EPA SW-846 Method 8082
170446	170555	7	SAMPLE	103062003	B29B39		PCBs by EPA SW-846 Method 8082
170446	170555	8	SAMPLE	103062004	B29B40		PCBs by EPA SW-846 Method 8082
170446	170555	9	SAMPLE	103062005	B29B41		PCBs by EPA SW-846 Method 8082
170446	170555	10	SAMPLE	103062006	B29B42		PCBs by EPA SW-846 Method 8082
170446	170555	11	SAMPLE	103062007	B29B43		PCBs by EPA SW-846 Method 8082
170446	170555	12	SAMPLE	103062008	B29B44		PCBs by EPA SW-846 Method 8082
170446	170555	13	SAMPLE	103062009	B29B45		PCBs by EPA SW-846 Method 8082
170446	170555	14	SAMPLE	103062010	B29B46		PCBs by EPA SW-846 Method 8082
170446	170555	15	SAMPLE	103062011	B29B47		PCBs by EPA SW-846 Method 8082
170446	170555	16	SAMPLE	103062012	B29B48		PCBs by EPA SW-846 Method 8082
170446	170555	17	SAMPLE	103062013	B29B49		PCBs by EPA SW-846 Method 8082

Batch QC List

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
170075	170103	1	IBLANK	42353	IBLANK		Gamma Energy Analysis-general
170075	170103	2	LCS	42354	LCS		Gamma Energy Analysis-general
170075	170103	3	DUP	42355	B29D58(103070010DUP)	103070010	Gamma Energy Analysis-general
170075	170103	6	SAMPLE	103062001	B29B37		Gamma Energy Analysis-general
170075	170103	7	SAMPLE	103062002	B29B38		Gamma Energy Analysis-general
170075	170103	8	SAMPLE	103062003	B29B39		Gamma Energy Analysis-general
170075	170103	9	SAMPLE	103062004	B29B40		Gamma Energy Analysis-general
170075	170103	10	SAMPLE	103062005	B29B41		Gamma Energy Analysis-general
170075	170103	11	SAMPLE	103062006	B29B42		Gamma Energy Analysis-general
170075	170103	12	SAMPLE	103062007	B29B43		Gamma Energy Analysis-general
170076	170104	1	IBLANK	42356	IBLANK		Gamma Energy Analysis-general
170076	170104	2	LCS	42357	LCS		Gamma Energy Analysis-general
170076	170104	3	DUP	42358	B29B44(103062008DUP)	103062008	Gamma Energy Analysis-general
170076	170104	4	SAMPLE	103062008	B29B44		Gamma Energy Analysis-general
170076	170104	5	SAMPLE	103062009	B29B45		Gamma Energy Analysis-general
170076	170104	6	SAMPLE	103062010	B29B46		Gamma Energy Analysis-general
170076	170104	7	SAMPLE	103062011	B29B47		Gamma Energy Analysis-general
170076	170104	8	SAMPLE	103062012	B29B48		Gamma Energy Analysis-general
170076	170104	9	SAMPLE	103062013	B29B49		Gamma Energy Analysis-general
170130	170345	1	BLANK	42494	BLANK		Strontium 89/90 (GPC/GEA)
170130	170345	2	LCS	42495	LCS		Strontium 89/90 (GPC/GEA)
170130	170345	3	DUP	42496	B29B37(103062001DUP)	103062001	Strontium 89/90 (GPC/GEA)
170130	170345	4	SAMPLE	103062001	B29B37		Strontium 89/90 (GPC/GEA)

Batch QC List

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
170130	170345	5	SAMPLE	103062002	B29B38		Strontium 89/90 (GPC/GEA)
170130	170345	6	SAMPLE	103062003	B29B39		Strontium 89/90 (GPC/GEA)
170130	170345	7	SAMPLE	103062004	B29B40		Strontium 89/90 (GPC/GEA)
170130	170345	8	SAMPLE	103062005	B29B41		Strontium 89/90 (GPC/GEA)
170130	170345	9	SAMPLE	103062006	B29B42		Strontium 89/90 (GPC/GEA)
170130	170345	10	SAMPLE	103062007	B29B43		Strontium 89/90 (GPC/GEA)
170131	170346	1	BLANK	42497	BLANK		Strontium 89/90 (GPC/GEA)
170131	170346	2	LCS	42498	LCS		Strontium 89/90 (GPC/GEA)
170131	170346	3	DUP	42499	B29B44(103062008DUP)	103062008	Strontium 89/90 (GPC/GEA)
170131	170346	4	SAMPLE	103062008	B29B44		Strontium 89/90 (GPC/GEA)
170131	170346	5	SAMPLE	103062009	B29B45		Strontium 89/90 (GPC/GEA)
170131	170346	6	SAMPLE	103062010	B29B46		Strontium 89/90 (GPC/GEA)
170131	170346	7	SAMPLE	103062011	B29B47		Strontium 89/90 (GPC/GEA)
170131	170346	8	SAMPLE	103062012	B29B48		Strontium 89/90 (GPC/GEA)
170131	170346	9	SAMPLE	103062013	B29B49		Strontium 89/90 (GPC/GEA)
170170	170340	1	BLANK	42563	BLANK		TC99 by Liquid Scintillation
170170	170340	2	LCS	42564	LCS		TC99 by Liquid Scintillation
170170	170340	3	SAMPLE	103062001	B29B37		TC99 by Liquid Scintillation
170170	170340	4	DUP	42565	B29B37(103062001DUP)	103062001	TC99 by Liquid Scintillation
170170	170340	5	MS	42566	B29B37(103062001MS)	103062001	TC99 by Liquid Scintillation
170170	170340	6	SAMPLE	103062002	B29B38		TC99 by Liquid Scintillation
170170	170340	7	SAMPLE	103062003	B29B39		TC99 by Liquid Scintillation
170170	170340	8	SAMPLE	103062004	B29B40		TC99 by Liquid Scintillation

Batch QC List

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
170170	170340	9	SAMPLE	103062005	B29B41		TC99 by Liquid Scintillation
170170	170340	10	SAMPLE	103062006	B29B42		TC99 by Liquid Scintillation
170170	170340	11	SAMPLE	103062007	B29B43		TC99 by Liquid Scintillation
170170	170340	12	SAMPLE	103062008	B29B44		TC99 by Liquid Scintillation
170171	170341	1	BLANK	42567	BLANK		TC99 by Liquid Scintillation
170171	170341	2	LCS	42568	LCS		TC99 by Liquid Scintillation
170171	170341	3	SAMPLE	103062009	B29B45		TC99 by Liquid Scintillation
170171	170341	4	DUP	42569	B29B45(103062009DUP)	103062009	TC99 by Liquid Scintillation
170171	170341	5	MS	42570	B29B45(103062009MS)	103062009	TC99 by Liquid Scintillation
170171	170341	6	SAMPLE	103062010	B29B46		TC99 by Liquid Scintillation
170171	170341	7	SAMPLE	103062011	B29B47		TC99 by Liquid Scintillation
170171	170341	8	SAMPLE	103062012	B29B48		TC99 by Liquid Scintillation
170171	170341	9	SAMPLE	103062013	B29B49		TC99 by Liquid Scintillation
170342	170492	1	BLANK	42739	BLANK		Americium/Curium (AEA)
170342	170492	2	LCS	42740	LCS		Americium/Curium (AEA)
170342	170492	3	DUP	42741	B29B37(103062001DUP)	103062001	Americium/Curium (AEA)
170342	170492	4	SAMPLE	103062001	B29B37		Americium/Curium (AEA)
170342	170492	5	SAMPLE	103062002	B29B38		Americium/Curium (AEA)
170342	170492	6	SAMPLE	103062003	B29B39		Americium/Curium (AEA)
170342	170492	7	SAMPLE	103062004	B29B40		Americium/Curium (AEA)
170342	170492	8	SAMPLE	103062005	B29B41		Americium/Curium (AEA)
170342	170492	9	SAMPLE	103062006	B29B42		Americium/Curium (AEA)
170342	170492	10	SAMPLE	103062007	B29B43		Americium/Curium (AEA)

Batch QC List

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
170342	170493	1	DUP	42741	B29B37(103062001DUP)	103062001	Plutonium (AEA)
170342	170493	2	SAMPLE	103062001	B29B37		Plutonium (AEA)
170342	170493	3	SAMPLE	103062002	B29B38		Plutonium (AEA)
170342	170493	4	SAMPLE	103062003	B29B39		Plutonium (AEA)
170342	170493	5	SAMPLE	103062004	B29B40		Plutonium (AEA)
170342	170493	6	SAMPLE	103062005	B29B41		Plutonium (AEA)
170342	170493	7	SAMPLE	103062006	B29B42		Plutonium (AEA)
170342	170493	8	SAMPLE	103062007	B29B43		Plutonium (AEA)
170342	170493	9	BLANK	42739	BLANK		Plutonium (AEA)
170342	170493	10	LCS	42740	LCS		Plutonium (AEA)
170342	170494	1	DUP	42741	B29B37(103062001DUP)	103062001	Uranium (AEA)
170342	170494	2	SAMPLE	103062001	B29B37		Uranium (AEA)
170342	170494	3	SAMPLE	103062002	B29B38		Uranium (AEA)
170342	170494	4	SAMPLE	103062003	B29B39		Uranium (AEA)
170342	170494	5	SAMPLE	103062004	B29B40		Uranium (AEA)
170342	170494	6	SAMPLE	103062005	B29B41		Uranium (AEA)
170342	170494	7	SAMPLE	103062006	B29B42		Uranium (AEA)
170342	170494	8	SAMPLE	103062007	B29B43		Uranium (AEA)
170342	170494	9	BLANK	42739	BLANK		Uranium (AEA)
170342	170494	10	LCS	42740	LCS		Uranium (AEA)
170343	170499	1	BLANK	42742	BLANK		Americium/Curium (AEA)
170343	170499	2	LCS	42743	LCS		Americium/Curium (AEA)
170343	170499	3	DUP	42744	B29B44(103062008DUP)	103062008	Americium/Curium (AEA)

Batch QC List

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
170343	170499	4	SAMPLE	103062008	B29B44		Americium/Curium (AEA)
170343	170499	5	SAMPLE	103062009	B29B45		Americium/Curium (AEA)
170343	170499	6	SAMPLE	103062010	B29B46		Americium/Curium (AEA)
170343	170499	7	SAMPLE	103062011	B29B47		Americium/Curium (AEA)
170343	170499	8	SAMPLE	103062012	B29B48		Americium/Curium (AEA)
170343	170499	9	SAMPLE	103062013	B29B49		Americium/Curium (AEA)
170343	170500	1	DUP	42744	B29B44(103062008DUP)	103062008	Plutonium (AEA)
170343	170500	2	SAMPLE	103062008	B29B44		Plutonium (AEA)
170343	170500	3	SAMPLE	103062009	B29B45		Plutonium (AEA)
170343	170500	4	SAMPLE	103062010	B29B46		Plutonium (AEA)
170343	170500	5	SAMPLE	103062011	B29B47		Plutonium (AEA)
170343	170500	6	SAMPLE	103062012	B29B48		Plutonium (AEA)
170343	170500	7	SAMPLE	103062013	B29B49		Plutonium (AEA)
170343	170500	8	BLANK	42742	BLANK		Plutonium (AEA)
170343	170500	9	LCS	42743	LCS		Plutonium (AEA)
170343	170501	1	DUP	42744	B29B44(103062008DUP)	103062008	Uranium (AEA)
170343	170501	2	SAMPLE	103062008	B29B44		Uranium (AEA)
170343	170501	3	SAMPLE	103062009	B29B45		Uranium (AEA)
170343	170501	4	SAMPLE	103062010	B29B46		Uranium (AEA)
170343	170501	5	SAMPLE	103062011	B29B47		Uranium (AEA)
170343	170501	6	SAMPLE	103062012	B29B48		Uranium (AEA)
170343	170501	7	SAMPLE	103062013	B29B49		Uranium (AEA)
170343	170501	8	BLANK	42742	BLANK		Uranium (AEA)

Batch QC List

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
170343	170501	9	LCS	42743	LCS		Uranium (AEA)

Batch QC List

Attention Michael Neely
Department Wet Chemistry

Group # WSCF103062

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
170366	170366	1	SAMPLE	103062001	B29B37		Dry Weight/Percent Moisture
170366	170366	2	SAMPLE	103062002	B29B38		Dry Weight/Percent Moisture
170366	170366	3	SAMPLE	103062003	B29B39		Dry Weight/Percent Moisture
170366	170366	4	SAMPLE	103062004	B29B40		Dry Weight/Percent Moisture
170366	170366	5	SAMPLE	103062005	B29B41		Dry Weight/Percent Moisture
170366	170366	6	SAMPLE	103062006	B29B42		Dry Weight/Percent Moisture
170366	170366	7	SAMPLE	103062007	B29B43		Dry Weight/Percent Moisture
170366	170366	8	SAMPLE	103062008	B29B44		Dry Weight/Percent Moisture
170366	170366	9	SAMPLE	103062009	B29B45		Dry Weight/Percent Moisture
170366	170366	10	SAMPLE	103062010	B29B46		Dry Weight/Percent Moisture
170366	170366	11	SAMPLE	103062011	B29B47		Dry Weight/Percent Moisture
170366	170366	12	SAMPLE	103062012	B29B48		Dry Weight/Percent Moisture
170366	170366	13	SAMPLE	103062013	B29B49		Dry Weight/Percent Moisture

Method Reference

Attention Michael Neely
Department Inorganic

Group # WSCF103062

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-265-403	Hexavalent Chromium Analysis		
	EPA SW-846	7196A	Hexavalent Chromium
	HEIS	7196_CR6	Hexavalent Chromium
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.

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 # WSCF103062

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-523-427	Polychlorinated Biphenyls (PCB'S) by Gas Chromatography		
	EPA SW-846	3510C	Separatory Funnel Liquid-Liquid Extraction
	EPA SW-846	3545	Pressurized Fluid Extraction (PFE)
	EPA SW-846	3665A	Sulfuric Acid/Permanganate Cleanup
	EPA SW-846	8000B	Determinative Chromatographic Separations
	EPA SW-846	8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography
	HEIS	8082_PCB_GC	Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Note: A complete list of WSCF analytical procedures and 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 # WSCF103062

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-220-406	Strontium-89 and 90 in Aqueous Samples by SR-SPEC Separation		
	HEIS	SRTOT_SEP_PRECIP_GPC	Strontium 89/90, by Sr-Spec Sep.
LA-508-471	Thorium, Neptunium, Plutonium, Americium, and Uranium In Soil and Water Using Eichrom Column Separation (Prep)		
	HEIS	PUISO_IE_PRECIP_AEA	Isotopic Plutonium, Alpha Spec
LA-508-471	Determination Of Uranium, Plutonium, And Americium		
	HEIS	AMCMISO_IE_PREC_AEA	Americium/Curium Iso, Alpha Spec
LA-508-481	Gamma Energy Analysis using the Canberra Genie Ssystem		
	HEIS	GAMMA_GS	Gamma Energy Analysis
LA-508-471	Determination Of Uranium, Plutonium, And Americium		
	HEIS	UISO_IE_PRECIP_AEA	Uranium Iso, Alpha Spec
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

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 # WSCF103062

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 # WSCF103062

Sample # 103062001
SAF# F11-013
Sample ID B29B37

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**12/01/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	BN	0.139		ug/g	1	0.11	0.54	12/02/10
ICPMS Prep										**11/21/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		454		mg/kg	1	0.11	1.1	11/22/10
Antimony	7440-36-0	LA-505-412	U	<0.32		mg/kg	1	0.32	3.2	11/22/10
Barium	7440-39-3	LA-505-412	N	85.7		mg/kg	1	0.22	2.2	11/22/10
Cadmium	7440-43-9	LA-505-412	U	<0.11		mg/kg	1	0.11	1.1	11/22/10
Chromium	7440-47-3	LA-505-412		6.11		mg/kg	1	0.54	5.4	11/22/10
Zinc	7440-66-6	LA-505-412		47.3		mg/kg	1	0.87	5.4	11/22/10
Lead	7439-92-1	LA-505-412		3.80		mg/kg	1	0.11	1.1	11/22/10
Mercury	7439-97-6	LA-505-412	U	<0.054		mg/kg	1	0.054	0.22	11/22/10
Arsenic	7440-38-2	LA-505-412	B	3.05		mg/kg	1	0.43	4.3	11/22/10
Thorium	7440-29-1	LA-505-412		2.92		mg/kg	1	0.11	0.54	11/22/10

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 # WSCF103062

Sample # 103062002
SAF# F11-013
Sample ID B29B38

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**12/01/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.11		ug/g	1	0.11	0.53	12/02/10
ICPMS Prep										**11/21/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		351		mg/kg	1	0.11	1.1	11/22/10
Antimony	7440-36-0	LA-505-412	U	<0.32		mg/kg	1	0.32	3.2	11/22/10
Barium	7440-39-3	LA-505-412	N	54.7		mg/kg	1	0.22	2.2	11/22/10
Cadmium	7440-43-9	LA-505-412	U	<0.11		mg/kg	1	0.11	1.1	11/22/10
Chromium	7440-47-3	LA-505-412		9.96		mg/kg	1	0.54	5.4	11/22/10
Zinc	7440-66-6	LA-505-412		46.6		mg/kg	1	0.86	5.4	11/22/10
Lead	7439-92-1	LA-505-412		5.43		mg/kg	1	0.11	1.1	11/22/10
Mercury	7439-97-6	LA-505-412	U	<0.054		mg/kg	1	0.054	0.22	11/22/10
Arsenic	7440-38-2	LA-505-412	B	3.67		mg/kg	1	0.43	4.3	11/22/10
Thorium	7440-29-1	LA-505-412		3.62		mg/kg	1	0.11	0.54	11/22/10

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 # WSCF103062

Sample # 103062003
SAF# F11-013
Sample ID B29B39

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**12/01/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.11		ug/g	1	0.11	0.54	12/02/10
ICPMS Prep										**11/21/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		369		mg/kg	1	0.11	1.1	11/22/10
Antimony	7440-36-0	LA-505-412	U	<0.32		mg/kg	1	0.32	3.2	11/22/10
Barium	7440-39-3	LA-505-412	N	98.8		mg/kg	1	0.22	2.2	11/22/10
Cadmium	7440-43-9	LA-505-412	U	<0.11		mg/kg	1	0.11	1.1	11/22/10
Chromium	7440-47-3	LA-505-412	B	5.00		mg/kg	1	0.54	5.4	11/22/10
Zinc	7440-66-6	LA-505-412		53.4		mg/kg	1	0.86	5.4	11/22/10
Lead	7439-92-1	LA-505-412		3.55		mg/kg	1	0.11	1.1	11/22/10
Mercury	7439-97-6	LA-505-412	U	<0.054		mg/kg	1	0.054	0.22	11/22/10
Arsenic	7440-38-2	LA-505-412	B	3.27		mg/kg	1	0.43	4.3	11/22/10
Thorium	7440-29-1	LA-505-412		2.38		mg/kg	1	0.11	0.54	11/22/10

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 # WSCF103062

Sample # 103062004
SAF# F11-013
Sample ID B29B40

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**12/01/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.11		ug/g	1	0.11	0.54	12/02/10
ICPMS Prep										**11/21/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		376		mg/kg	1	0.11	1.1	11/22/10
Antimony	7440-36-0	LA-505-412	U	<0.32		mg/kg	1	0.32	3.2	11/22/10
Barium	7440-39-3	LA-505-412	N	73.2		mg/kg	1	0.22	2.2	11/22/10
Cadmium	7440-43-9	LA-505-412	U	<0.11		mg/kg	1	0.11	1.1	11/22/10
Chromium	7440-47-3	LA-505-412		6.82		mg/kg	1	0.54	5.4	11/22/10
Zinc	7440-66-6	LA-505-412		46.2		mg/kg	1	0.86	5.4	11/22/10
Lead	7439-92-1	LA-505-412		3.77		mg/kg	1	0.11	1.1	11/22/10
Mercury	7439-97-6	LA-505-412	U	<0.054		mg/kg	1	0.054	0.22	11/22/10
Arsenic	7440-38-2	LA-505-412	B	2.87		mg/kg	1	0.43	4.3	11/22/10
Thorium	7440-29-1	LA-505-412		2.79		mg/kg	1	0.11	0.54	11/22/10

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 # WSCF103062

Sample # 103062005
SAF# F11-013
Sample ID B29B41

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**12/01/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.11		ug/g	1	0.11	0.56	12/02/10
ICPMS Prep										**11/21/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		379		mg/kg	1	0.11	1.1	11/22/10
Antimony	7440-36-0	LA-505-412	U	<0.33		mg/kg	1	0.33	3.3	11/22/10
Barium	7440-39-3	LA-505-412	N	58.8		mg/kg	1	0.22	2.2	11/22/10
Cadmium	7440-43-9	LA-505-412	U	<0.11		mg/kg	1	0.11	1.1	11/22/10
Chromium	7440-47-3	LA-505-412		10.8		mg/kg	1	0.55	5.5	11/22/10
Zinc	7440-66-6	LA-505-412		53.3		mg/kg	1	0.88	5.5	11/22/10
Lead	7439-92-1	LA-505-412		6.08		mg/kg	1	0.11	1.1	11/22/10
Mercury	7439-97-6	LA-505-412	U	<0.055		mg/kg	1	0.055	0.22	11/22/10
Arsenic	7440-38-2	LA-505-412	B	3.99		mg/kg	1	0.44	4.4	11/22/10
Thorium	7440-29-1	LA-505-412		3.54		mg/kg	1	0.11	0.55	11/22/10

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 # WSCF103062

Sample # 103062006
SAF# F11-013
Sample ID B29B42

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**12/01/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.11		ug/g	1	0.11	0.54	12/02/10
ICPMS Prep										**11/21/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		350		mg/kg	1	0.11	1.1	11/22/10
Antimony	7440-36-0	LA-505-412	U	<0.33		mg/kg	1	0.33	3.3	11/22/10
Barium	7440-39-3	LA-505-412	N	69.5		mg/kg	1	0.22	2.2	11/22/10
Cadmium	7440-43-9	LA-505-412	U	<0.11		mg/kg	1	0.11	1.1	11/22/10
Chromium	7440-47-3	LA-505-412		7.53		mg/kg	1	0.55	5.5	11/22/10
Zinc	7440-66-6	LA-505-412		46.8		mg/kg	1	0.88	5.5	11/22/10
Lead	7439-92-1	LA-505-412		5.08		mg/kg	1	0.11	1.1	11/22/10
Mercury	7439-97-6	LA-505-412	U	<0.055		mg/kg	1	0.055	0.22	11/22/10
Arsenic	7440-38-2	LA-505-412	B	3.87		mg/kg	1	0.44	4.4	11/22/10
Thorium	7440-29-1	LA-505-412		2.89		mg/kg	1	0.11	0.55	11/22/10

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 # WSCF103062

Sample # 103062007
SAF# F11-013
Sample ID B29B43

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**12/01/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.11		ug/g	1	0.11	0.53	12/02/10
ICPMS Prep										**11/21/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		281		mg/kg	1	0.11	1.1	11/22/10
Antimony	7440-36-0	LA-505-412	U	<0.32		mg/kg	1	0.32	3.2	11/22/10
Barium	7440-39-3	LA-505-412	N	41.5		mg/kg	1	0.21	2.1	11/22/10
Cadmium	7440-43-9	LA-505-412	U	<0.11		mg/kg	1	0.11	1.1	11/22/10
Chromium	7440-47-3	LA-505-412	B	4.63		mg/kg	1	0.53	5.3	11/22/10
Zinc	7440-66-6	LA-505-412		47.2		mg/kg	1	0.85	5.3	11/22/10
Lead	7439-92-1	LA-505-412		3.29		mg/kg	1	0.11	1.1	11/22/10
Mercury	7439-97-6	LA-505-412	U	<0.053		mg/kg	1	0.053	0.21	11/22/10
Arsenic	7440-38-2	LA-505-412	B	2.50		mg/kg	1	0.43	4.3	11/22/10
Thorium	7440-29-1	LA-505-412		1.87		mg/kg	1	0.11	0.53	11/22/10

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 # WSCF103062

Sample # 103062008
SAF# F11-013
Sample ID B29B44

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**12/01/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.10		ug/g	1	0.10	0.52	12/02/10
ICPMS Prep										**11/21/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		373		mg/kg	1	0.11	1.1	11/22/10
Antimony	7440-36-0	LA-505-412	U	<0.32		mg/kg	1	0.32	3.2	11/22/10
Barium	7440-39-3	LA-505-412	N	54.7		mg/kg	1	0.21	2.1	11/22/10
Cadmium	7440-43-9	LA-505-412	U	<0.11		mg/kg	1	0.11	1.1	11/22/10
Chromium	7440-47-3	LA-505-412		5.34		mg/kg	1	0.53	5.3	11/22/10
Zinc	7440-66-6	LA-505-412		53.5		mg/kg	1	0.85	5.3	11/22/10
Lead	7439-92-1	LA-505-412		3.53		mg/kg	1	0.11	1.1	11/22/10
Mercury	7439-97-6	LA-505-412	U	<0.053		mg/kg	1	0.053	0.21	11/22/10
Arsenic	7440-38-2	LA-505-412	B	2.32		mg/kg	1	0.42	4.2	11/22/10
Thorium	7440-29-1	LA-505-412		2.40		mg/kg	1	0.11	0.53	11/22/10

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 # WSCF103062

Sample # 103062009
SAF# F11-013
Sample ID B29B45

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**12/01/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.11		ug/g	1	0.11	0.53	12/02/10
ICPMS Prep										**11/21/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		377		mg/kg	1	0.11	1.1	11/22/10
Antimony	7440-36-0	LA-505-412	U	<0.32		mg/kg	1	0.32	3.2	11/22/10
Barium	7440-39-3	LA-505-412	N	51.1		mg/kg	1	0.21	2.1	11/22/10
Cadmium	7440-43-9	LA-505-412	U	<0.11		mg/kg	1	0.11	1.1	11/22/10
Chromium	7440-47-3	LA-505-412	B	5.16		mg/kg	1	0.53	5.3	11/22/10
Zinc	7440-66-6	LA-505-412		54.7		mg/kg	1	0.85	5.3	11/22/10
Lead	7439-92-1	LA-505-412		3.31		mg/kg	1	0.11	1.1	11/22/10
Mercury	7439-97-6	LA-505-412	U	<0.053		mg/kg	1	0.053	0.21	11/22/10
Arsenic	7440-38-2	LA-505-412	B	2.53		mg/kg	1	0.42	4.2	11/22/10
Thorium	7440-29-1	LA-505-412		2.26		mg/kg	1	0.11	0.53	11/22/10

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 # WSCF103062

Sample # 103062010
SAF# F11-013
Sample ID B29B46

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**12/01/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.11		ug/g	1	0.11	0.53	12/02/10
ICPMS Prep										**11/21/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		370		mg/kg	1	0.11	1.1	11/22/10
Antimony	7440-36-0	LA-505-412	U	<0.32		mg/kg	1	0.32	3.2	11/22/10
Barium	7440-39-3	LA-505-412	N	72.2		mg/kg	1	0.21	2.1	11/22/10
Cadmium	7440-43-9	LA-505-412	U	<0.11		mg/kg	1	0.11	1.1	11/22/10
Chromium	7440-47-3	LA-505-412		9.06		mg/kg	1	0.54	5.4	11/22/10
Zinc	7440-66-6	LA-505-412		47.3		mg/kg	1	0.86	5.4	11/22/10
Lead	7439-92-1	LA-505-412		5.53		mg/kg	1	0.11	1.1	11/22/10
Mercury	7439-97-6	LA-505-412	U	<0.054		mg/kg	1	0.054	0.21	11/22/10
Arsenic	7440-38-2	LA-505-412	B	3.92		mg/kg	1	0.43	4.3	11/22/10
Thorium	7440-29-1	LA-505-412		3.39		mg/kg	1	0.11	0.54	11/22/10

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 # WSCF103062

Sample # 103062011
SAF# F11-013
Sample ID B29B47

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**12/01/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.11		ug/g	1	0.11	0.54	12/02/10
ICPMS Prep										**11/21/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		340		mg/kg	1	0.11	1.1	11/22/10
Antimony	7440-36-0	LA-505-412	U	<0.32		mg/kg	1	0.32	3.2	11/22/10
Barium	7440-39-3	LA-505-412	N	70.4		mg/kg	1	0.21	2.1	11/22/10
Cadmium	7440-43-9	LA-505-412	U	<0.11		mg/kg	1	0.11	1.1	11/22/10
Chromium	7440-47-3	LA-505-412		8.49		mg/kg	1	0.53	5.3	11/22/10
Zinc	7440-66-6	LA-505-412		41.8		mg/kg	1	0.86	5.3	11/22/10
Lead	7439-92-1	LA-505-412		5.14		mg/kg	1	0.11	1.1	11/22/10
Mercury	7439-97-6	LA-505-412	U	<0.053		mg/kg	1	0.053	0.21	11/22/10
Arsenic	7440-38-2	LA-505-412	B	3.36		mg/kg	1	0.43	4.3	11/22/10
Thorium	7440-29-1	LA-505-412		2.83		mg/kg	1	0.11	0.53	11/22/10

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 # WSCF103062

Sample # 103062012
SAF# F11-013
Sample ID B29B48

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**12/01/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.11		ug/g	1	0.11	0.54	12/02/10
ICPMS Prep										**11/21/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		401		mg/kg	1	0.11	1.1	11/22/10
Antimony	7440-36-0	LA-505-412	U	<0.33		mg/kg	1	0.33	3.3	11/22/10
Barium	7440-39-3	LA-505-412	N	81.9		mg/kg	1	0.22	2.2	11/22/10
Cadmium	7440-43-9	LA-505-412	U	<0.11		mg/kg	1	0.11	1.1	11/22/10
Chromium	7440-47-3	LA-505-412		10.9		mg/kg	1	0.54	5.4	11/22/10
Zinc	7440-66-6	LA-505-412		47.2		mg/kg	1	0.87	5.4	11/22/10
Lead	7439-92-1	LA-505-412		6.15		mg/kg	1	0.11	1.1	11/22/10
Mercury	7439-97-6	LA-505-412	U	<0.054		mg/kg	1	0.054	0.22	11/22/10
Arsenic	7440-38-2	LA-505-412	B	3.59		mg/kg	1	0.43	4.3	11/22/10
Thorium	7440-29-1	LA-505-412		3.48		mg/kg	1	0.11	0.54	11/22/10

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 # WSCF103062

Sample # 103062013
SAF# F11-013
Sample ID B29B49

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI) Prep										**12/01/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	UN	<0.11		ug/g	1	0.11	0.54	12/02/10
ICPMS Prep										**11/21/10**
ICP-MS										
Manganese	7439-96-5	LA-505-412		329		mg/kg	1	0.11	1.1	11/22/10
Antimony	7440-36-0	LA-505-412	U	<0.33		mg/kg	1	0.33	3.3	11/22/10
Barium	7440-39-3	LA-505-412	N	51.7		mg/kg	1	0.22	2.2	11/22/10
Cadmium	7440-43-9	LA-505-412	U	<0.11		mg/kg	1	0.11	1.1	11/22/10
Chromium	7440-47-3	LA-505-412		6.28		mg/kg	1	0.54	5.4	11/22/10
Zinc	7440-66-6	LA-505-412		50.1		mg/kg	1	0.87	5.4	11/22/10
Lead	7439-92-1	LA-505-412		4.77		mg/kg	1	0.11	1.1	11/22/10
Mercury	7439-97-6	LA-505-412	U	<0.054		mg/kg	1	0.054	0.22	11/22/10
Arsenic	7440-38-2	LA-505-412	B	2.33		mg/kg	1	0.43	4.3	11/22/10
Thorium	7440-29-1	LA-505-412		2.38		mg/kg	1	0.11	0.54	11/22/10

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, Semivolatiles

Group # WSCF103062

Sample # 103062001
SAF# F11-013
Sample ID B29B37

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**11/30/10**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	12/01/10
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1262	37324-23-5	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1268	11100-14-4	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10

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 < 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)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF103062

Sample # 103062002
SAF# F11-013
Sample ID B29B38

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**11/30/10**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1221	11104-28-2	LA-523-427	U	<9		ug/kg	1	9	20	12/01/10
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1262	37324-23-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1268	11100-14-4	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10

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 < 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)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF103062

Sample # 103062003
SAF# F11-013
Sample ID B29B39

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**11/30/10**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1221	11104-28-2	LA-523-427	U	<9		ug/kg	1	9	20	12/01/10
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1262	37324-23-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1268	11100-14-4	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10

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 < 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)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF103062

Sample # 103062004
SAF# F11-013
Sample ID B29B40

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**11/30/10**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1221	11104-28-2	LA-523-427	U	<9		ug/kg	1	9	20	12/01/10
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1262	37324-23-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1268	11100-14-4	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10

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 < 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)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF103062

Sample # 103062005
SAF# F11-013
Sample ID B29B41

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**11/30/10**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1221	11104-28-2	LA-523-427	U	<9		ug/kg	1	9	20	12/01/10
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1262	37324-23-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1268	11100-14-4	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10

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 < 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)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF103062

Sample # 103062006
SAF# F11-013
Sample ID B29B42

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**11/30/10**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1221	11104-28-2	LA-523-427	U	<9		ug/kg	1	9	20	12/01/10
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1262	37324-23-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1268	11100-14-4	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10

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 < 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)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF103062

Sample # 103062007
SAF# F11-013
Sample ID B29B43

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**11/30/10**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	12/01/10
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1262	37324-23-5	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1268	11100-14-4	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10

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 < 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)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF103062

Sample # 103062008
SAF# F11-013
Sample ID B29B44

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**11/30/10**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	12/01/10
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1262	37324-23-5	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1268	11100-14-4	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10

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 < 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)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF103062

Sample # 103062009
SAF# F11-013
Sample ID B29B45

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**11/30/10**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1221	11104-28-2	LA-523-427	U	<8		ug/kg	1	8	20	12/01/10
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1260	11096-82-5	LA-523-427		26		ug/kg	1	4	8	12/01/10
Aroclor-1262	37324-23-5	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10
Aroclor-1268	11100-14-4	LA-523-427	U	<4		ug/kg	1	4	8	12/01/10

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 < 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)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF103062

Sample # 103062010
SAF# F11-013
Sample ID B29B46

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**11/30/10**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1221	11104-28-2	LA-523-427	U	<9		ug/kg	1	9	20	12/01/10
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1260	11096-82-5	LA-523-427		22		ug/kg	1	4	9	12/01/10
Aroclor-1262	37324-23-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1268	11100-14-4	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10

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 < 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)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF103062

Sample # 103062011
SAF# F11-013
Sample ID B29B47

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**11/30/10**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1221	11104-28-2	LA-523-427	U	<9		ug/kg	1	9	20	12/01/10
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1260	11096-82-5	LA-523-427	J	4.7		ug/kg	1	4	9	12/01/10
Aroclor-1262	37324-23-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1268	11100-14-4	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10

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 < 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)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF103062

Sample # 103062012
SAF# F11-013
Sample ID B29B48

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**11/30/10**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1221	11104-28-2	LA-523-427	U	<9		ug/kg	1	9	20	12/01/10
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1262	37324-23-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1268	11100-14-4	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10

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 < 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)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF103062

Sample # 103062013
SAF# F11-013
Sample ID B29B49

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
PCB Prep Solids										**11/30/10**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1221	11104-28-2	LA-523-427	U	<9		ug/kg	1	9	20	12/01/10
Aroclor-1232	11141-16-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1242	53469-21-9	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1248	12672-29-6	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1254	11097-69-1	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1260	11096-82-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1262	37324-23-5	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10
Aroclor-1268	11100-14-4	LA-523-427	U	<4		ug/kg	1	4	9	12/01/10

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 < 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)

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

Sample # 103062001
SAF# F11-013
Sample ID B29B37

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**11/19/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	6.8E-3	.013	pCi/g	1	0.025		11/21/10
Cobalt-60	10198-40-0	LA-508-481	U	0.012	.011	pCi/g	1	0.024		11/21/10
Europium-152	14683-23-9	LA-508-481	U	0.019	.041	pCi/g	1	0.072		11/21/10
Europium-154	15585-10-1	LA-508-481	U	6.0E-4	.036	pCi/g	1	0.070		11/21/10
Europium-155	14391-16-3	LA-508-481	U	0.071	.071	pCi/g	1	0.10		11/21/10
SR-89/90										**11/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.2	1.1	pCi/g	1	0.46		12/02/10
Tc-99										**11/22/10**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	-0.22	.14	pCi/g	1	0.22		11/29/10
Th/Pu/Am/U Teva										**11/30/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	1.9E-3	.039	pCi/g	1	0.075		12/02/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	1.8E-3	.0017	pCi/g	1	0.013		12/01/10
Plutonium-239/240	PU-239/240	LA-508-471		0.013	.0092	pCi/g	1	0.013		12/01/10

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 # WSCF103062

Sample # 103062001
SAF# F11-013
Sample ID B29B37

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.14	.048	pCi/g	1	0.023		12/01/10
Uranium-235	15117-96-1	LA-508-471		0.19	.059	pCi/g	1	0.021		12/01/10
Uranium-238	U-238	LA-508-471	U	4.2E-3	.0056	pCi/g	1	0.016		12/01/10

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 # WSCF103062

Sample # 103062002
SAF# F11-013
Sample ID B29B38

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**11/19/10**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.78	.11	pCi/g	1	0.026		11/21/10
Cobalt-60	10198-40-0	LA-508-481	U	-0.016	.011	pCi/g	1	0.018		11/21/10
Europium-152	14683-23-9	LA-508-481	U	0.014	.047	pCi/g	1	0.088		11/21/10
Europium-154	15585-10-1	LA-508-481	U	-0.042	.043	pCi/g	1	0.075		11/21/10
Europium-155	14391-16-3	LA-508-481	U	0.075	.086	pCi/g	1	0.11		11/21/10
SR-89/90										**11/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-2.2	1	pCi/g	1	0.42		12/02/10
Tc-99										**11/22/10**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	-0.11	.15	pCi/g	1	0.22		11/29/10
Th/Pu/Am/U Teva										**11/30/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	0.051	.046	pCi/g	1	0.077		12/02/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-3.6E-3	.0067	pCi/g	1	0.019		12/01/10
Plutonium-239/240	PU-239/240	LA-508-471		0.029	.015	pCi/g	1	0.013		12/01/10

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 # WSCF103062

Sample # 103062002
SAF# F11-013
Sample ID B29B38

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.22	.067	pCi/g	1	0.016		12/01/10
Uranium-235	15117-96-1	LA-508-471		0.022	.015	pCi/g	1	6.6E-3		12/01/10
Uranium-238	U-238	LA-508-471		0.23	.069	pCi/g	1	0.016		12/01/10

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 # WSCF103062

Sample # 103062003
SAF# F11-013
Sample ID B29B39

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**11/19/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-4.3E-4	.012	pCi/g	1	0.023		11/22/10
Cobalt-60	10198-40-0	LA-508-481	U	4.2E-3	.012	pCi/g	1	0.024		11/22/10
Europium-152	14683-23-9	LA-508-481	U	-0.031	.037	pCi/g	1	0.065		11/22/10
Europium-154	15585-10-1	LA-508-481	U	-0.018	.034	pCi/g	1	0.063		11/22/10
Europium-155	14391-16-3	LA-508-481	U	8.9E-3	.052	pCi/g	1	0.095		11/22/10
SR-89/90										**11/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.7	1	pCi/g	1	0.46		12/02/10
Tc-99										**11/22/10**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	-0.11	.14	pCi/g	1	0.22		11/29/10
Th/Pu/Am/U Teva										**11/30/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	0.031	.04	pCi/g	1	0.070		12/02/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	1.9E-3	.0062	pCi/g	1	0.014		12/01/10
Plutonium-239/240	PU-239/240	LA-508-471	U	1.9E-3	.0018	pCi/g	1	0.014		12/01/10

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 # WSCF103062

Sample # 103062003
SAF# F11-013
Sample ID B29B39

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.15	.049	pCi/g	1	0.020		12/01/10
Uranium-235	15117-96-1	LA-508-471		0.019	.013	pCi/g	1	6.3E-3		12/01/10
Uranium-238	U-238	LA-508-471		0.18	.057	pCi/g	1	0.020		12/01/10

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 # WSCF103062

Sample # 103062004
SAF# F11-013
Sample ID B29B40

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**11/19/10**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.042	.02	pCi/g	1	0.024		11/22/10
Cobalt-60	10198-40-0	LA-508-481	U	0.016	.016	pCi/g	1	0.019		11/22/10
Europium-152	14683-23-9	LA-508-481	U	-5.9E-3	.051	pCi/g	1	0.069		11/22/10
Europium-154	15585-10-1	LA-508-481	U	-0.020	.04	pCi/g	1	0.073		11/22/10
Europium-155	14391-16-3	LA-508-481	U	-0.017	.054	pCi/g	1	0.097		11/22/10
SR-89/90										**11/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-2.1	.98	pCi/g	1	0.45		12/02/10
Tc-99										**11/22/10**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	-0.22	.14	pCi/g	1	0.22		11/29/10
Th/Pu/Am/U Teva										**11/30/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	-0.0020	.036	pCi/g	1	0.070		12/02/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	1.9E-3	.0018	pCi/g	1	0.015		12/01/10
Plutonium-239/240	PU-239/240	LA-508-471		0.018	.012	pCi/g	1	0.015		12/01/10

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 # WSCF103062

Sample # 103062004
SAF# F11-013
Sample ID B29B40

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.16	.051	pCi/g	1	0.015		12/01/10
Uranium-235	15117-96-1	LA-508-471		0.018	.012	pCi/g	1	0.0060		12/01/10
Uranium-238	U-238	LA-508-471		0.15	.048	pCi/g	1	5.5E-3		12/01/10

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 # WSCF103062

Sample # 103062005
SAF# F11-013
Sample ID B29B41

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**11/19/10**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.094	.025	pCi/g	1	0.027		11/22/10
Cobalt-60	10198-40-0	LA-508-481	U	4.3E-3	.012	pCi/g	1	0.023		11/22/10
Europium-152	14683-23-9	LA-508-481	U	2.4E-3	.045	pCi/g	1	0.075		11/22/10
Europium-154	15585-10-1	LA-508-481	U	-0.014	.044	pCi/g	1	0.074		11/22/10
Europium-155	14391-16-3	LA-508-481	U	0.021	.059	pCi/g	1	0.11		11/22/10
SR-89/90										**11/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	1.6E-3	.96	pCi/g	1	0.47		12/02/10
Tc-99										**11/22/10**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	-0.11	.15	pCi/g	1	0.22		11/29/10
Th/Pu/Am/U Teva										**11/30/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	-9.8E-3	.036	pCi/g	1	0.072		12/02/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	2.2E-3	.031	pCi/g	1	0.061		12/02/10
Plutonium-239/240	PU-239/240	LA-508-471	U	0.015	.014	pCi/g	1	0.020		12/02/10

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 # WSCF103062

Sample # 103062005
SAF# F11-013
Sample ID B29B41

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.15	.05	pCi/g	1	0.023		12/01/10
Uranium-235	15117-96-1	LA-508-471	U	0.012	.012	pCi/g	1	0.017		12/01/10
Uranium-238	U-238	LA-508-471		0.18	.056	pCi/g	1	0.016		12/01/10

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 # WSCF103062

Sample # 103062006
SAF# F11-013
Sample ID B29B42

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**11/19/10**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.050	.021	pCi/g	1	0.029		11/22/10
Cobalt-60	10198-40-0	LA-508-481		0.035	.034	pCi/g	1	0.028		11/22/10
Europium-152	14683-23-9	LA-508-481	U	0.038	.051	pCi/g	1	0.090		11/22/10
Europium-154	15585-10-1	LA-508-481	U	-4.7E-3	.047	pCi/g	1	0.092		11/22/10
Europium-155	14391-16-3	LA-508-481	U	2.6E-3	.061	pCi/g	1	0.11		11/22/10
SR-89/90										**11/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-2.3	1	pCi/g	1	0.47		12/02/10
Tc-99										**11/22/10**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	0.0	.14	pCi/g	1	0.22		11/29/10
Th/Pu/Am/U Teva										**11/30/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	0.042	.035	pCi/g	1	0.057		12/02/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	0.064	.048	pCi/g	1	0.079		12/02/10
Plutonium-239/240	PU-239/240	LA-508-471	U	0.014	.016	pCi/g	1	0.028		12/02/10

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 # WSCF103062

Sample # 103062006
SAF# F11-013
Sample ID B29B42

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.15	.049	pCi/g	1	0.017		12/01/10
Uranium-235	15117-96-1	LA-508-471	U	7.4E-3	.008	pCi/g	1	0.018		12/01/10
Uranium-238	U-238	LA-508-471		0.19	.058	pCi/g	1	0.017		12/01/10

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 # WSCF103062

Sample # 103062007
SAF# F11-013
Sample ID B29B43

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**11/19/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	-1.5E-3	.015	pCi/g	1	0.028		11/22/10
Cobalt-60	10198-40-0	LA-508-481	U	3.2E-3	.012	pCi/g	1	0.024		11/22/10
Europium-152	14683-23-9	LA-508-481	U	-5.5E-3	.046	pCi/g	1	0.074		11/22/10
Europium-154	15585-10-1	LA-508-481	U	0.015	.042	pCi/g	1	0.083		11/22/10
Europium-155	14391-16-3	LA-508-481	U	0.029	.058	pCi/g	1	0.11		11/22/10
SR-89/90										**11/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.7	.97	pCi/g	1	0.45		12/02/10
Tc-99										**11/22/10**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	-0.11	.15	pCi/g	1	0.21		11/29/10
Th/Pu/Am/U Teva										**11/30/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	0.017	.034	pCi/g	1	0.062		12/02/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	0.018	.044	pCi/g	1	0.080		12/02/10
Plutonium-239/240	PU-239/240	LA-508-471	U	2.3E-3	.0095	pCi/g	1	0.021		12/02/10

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 # WSCF103062

Sample # 103062007
SAF# F11-013
Sample ID B29B43

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.12	.043	pCi/g	1	0.022		12/01/10
Uranium-235	15117-96-1	LA-508-471	U	0.016	.015	pCi/g	1	0.021		12/01/10
Uranium-238	U-238	LA-508-471		0.13	.045	pCi/g	1	0.015		12/01/10

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 # WSCF103062

Sample # 103062008
SAF# F11-013
Sample ID B29B44

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**11/19/10**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.093	.028	pCi/g	1	0.023		11/29/10
Cobalt-60	10198-40-0	LA-508-481	U	0.010	.012	pCi/g	1	0.025		11/29/10
Europium-152	14683-23-9	LA-508-481	U	-0.013	.039	pCi/g	1	0.067		11/29/10
Europium-154	15585-10-1	LA-508-481	U	4.1E-3	.04	pCi/g	1	0.077		11/29/10
Europium-155	14391-16-3	LA-508-481	U	0.048	.06	pCi/g	1	0.11		11/29/10
SR-89/90										**11/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-2.3	1.1	pCi/g	1	0.38		12/02/10
Tc-99										**11/22/10**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421		1.4	.3	pCi/g	1	0.21		11/29/10
Th/Pu/Am/U Teva										**11/30/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	3.6E-3	.034	pCi/g	1	0.063		12/02/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	1.8E-3	.0017	pCi/g	1	0.029		12/02/10
Plutonium-239/240	PU-239/240	LA-508-471		0.014	.0099	pCi/g	1	0.013		12/02/10

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 # WSCF103062

Sample # 103062008
SAF# F11-013
Sample ID B29B44

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.17	.053	pCi/g	1	0.019		12/01/10
Uranium-235	15117-96-1	LA-508-471	U	6.5E-3	.0093	pCi/g	1	0.016		12/01/10
Uranium-238	U-238	LA-508-471		0.17	.053	pCi/g	1	5.4E-3		12/01/10

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 # WSCF103062

Sample # 103062009
SAF# F11-013
Sample ID B29B45

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**11/19/10**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.078	.022	pCi/g	1	0.026		11/29/10
Cobalt-60	10198-40-0	LA-508-481	U	-7.4E-3	.013	pCi/g	1	0.023		11/29/10
Europium-152	14683-23-9	LA-508-481	U	-4.6E-4	.044	pCi/g	1	0.075		11/29/10
Europium-154	15585-10-1	LA-508-481	U	-0.012	.044	pCi/g	1	0.082		11/29/10
Europium-155	14391-16-3	LA-508-481	U	-0.023	.059	pCi/g	1	0.10		11/29/10
SR-89/90										**11/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.4	1.1	pCi/g	1	0.38		12/02/10
Tc-99										**11/22/10**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	-0.21	.14	pCi/g	1	0.21		11/24/10
Th/Pu/Am/U Teva										**11/30/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	1.8E-3	.0017	pCi/g	1	0.060		12/02/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-1.6E-3	.0052	pCi/g	1	0.015		12/02/10
Plutonium-239/240	PU-239/240	LA-508-471	U	0.011	.0082	pCi/g	1	0.012		12/02/10

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 # WSCF103062

Sample # 103062009
SAF# F11-013
Sample ID B29B45

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.12	.041	pCi/g	1	5.3E-3		12/01/10
Uranium-235	15117-96-1	LA-508-471	U	8.5E-3	.0083	pCi/g	1	0.016		12/01/10
Uranium-238	U-238	LA-508-471		0.11	.039	pCi/g	1	0.014		12/01/10

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 # WSCF103062

Sample # 103062010
SAF# F11-013
Sample ID B29B46

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**11/19/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	0.011	.017	pCi/g	1	0.034		11/29/10
Cobalt-60	10198-40-0	LA-508-481	U	-0.014	.015	pCi/g	1	0.025		11/29/10
Europium-152	14683-23-9	LA-508-481	U	-0.031	.052	pCi/g	1	0.085		11/29/10
Europium-154	15585-10-1	LA-508-481	U	-0.017	.042	pCi/g	1	0.078		11/29/10
Europium-155	14391-16-3	LA-508-481	U	-1.5E-3	.065	pCi/g	1	0.12		11/29/10
SR-89/90										**11/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-2.3	.98	pCi/g	1	0.37		12/02/10
Tc-99										**11/22/10**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	-0.21	.15	pCi/g	1	0.32		11/24/10
Th/Pu/Am/U Teva										**11/30/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	0.021	.03	pCi/g	1	0.053		12/02/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	1.7E-3	.0016	pCi/g	1	0.016		12/02/10
Plutonium-239/240	PU-239/240	LA-508-471	U	0.0070	.0067	pCi/g	1	0.013		12/02/10

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 # WSCF103062

Sample # 103062010
SAF# F11-013
Sample ID B29B46

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.12	.041	pCi/g	1	0.015		12/01/10
Uranium-235	15117-96-1	LA-508-471	U	6.7E-3	.0074	pCi/g	1	0.016		12/01/10
Uranium-238	U-238	LA-508-471		0.16	.051	pCi/g	1	5.5E-3		12/01/10

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 # WSCF103062

Sample # 103062011
SAF# F11-013
Sample ID B29B47

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**11/19/10**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.029	.024	pCi/g	1	0.026		11/29/10
Cobalt-60	10198-40-0	LA-508-481	U	9.2E-3	.013	pCi/g	1	0.027		11/29/10
Europium-152	14683-23-9	LA-508-481	U	-2.9E-4	.059	pCi/g	1	0.081		11/29/10
Europium-154	15585-10-1	LA-508-481	U	-3.3E-4	.055	pCi/g	1	0.090		11/29/10
Europium-155	14391-16-3	LA-508-481	U	0.045	.066	pCi/g	1	0.12		11/29/10
SR-89/90										**11/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.0	1	pCi/g	1	0.42		12/02/10
Tc-99										**11/22/10**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	0.0	.14	pCi/g	1	0.21		11/24/10
Th/Pu/Am/U Teva										**11/30/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	0.019	.033	pCi/g	1	0.058		12/02/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	5.3E-3	.0088	pCi/g	1	0.016		12/02/10
Plutonium-239/240	PU-239/240	LA-508-471	U	8.8E-3	.0076	pCi/g	1	0.013		12/02/10

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 # WSCF103062

Sample # 103062011
SAF# F11-013
Sample ID B29B47

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.14	.046	pCi/g	1	0.019		12/01/10
Uranium-235	15117-96-1	LA-508-471	U	0.011	.011	pCi/g	1	0.016		12/01/10
Uranium-238	U-238	LA-508-471		0.14	.046	pCi/g	1	5.4E-3		12/01/10

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 # WSCF103062

Sample # 103062012
SAF# F11-013
Sample ID B29B48

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**11/19/10**
GEA										
Cesium-137	10045-97-3	LA-508-481	U	0.021	.019	pCi/g	1	0.031		11/29/10
Cobalt-60	10198-40-0	LA-508-481	U	0.0020	.014	pCi/g	1	0.027		11/29/10
Europium-152	14683-23-9	LA-508-481	U	-0.021	.049	pCi/g	1	0.087		11/29/10
Europium-154	15585-10-1	LA-508-481	U	7.6E-3	.045	pCi/g	1	0.090		11/29/10
Europium-155	14391-16-3	LA-508-481	U	-0.030	.064	pCi/g	1	0.11		11/29/10
SR-89/90										**11/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-2.6	.98	pCi/g	1	0.37		12/02/10
Tc-99										**11/22/10**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	-0.22	.14	pCi/g	1	0.22		11/24/10
Th/Pu/Am/U Teva										**11/30/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	0.037	.034	pCi/g	1	0.056		12/02/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-1.9E-3	.0094	pCi/g	1	0.023		12/02/10
Plutonium-239/240	PU-239/240	LA-508-471	U	9.6E-3	.0081	pCi/g	1	0.013		12/02/10

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 # WSCF103062

Sample # 103062012
SAF# F11-013
Sample ID B29B48

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.20	.06	pCi/g	1	0.020		12/01/10
Uranium-235	15117-96-1	LA-508-471		0.029	.017	pCi/g	1	0.017		12/01/10
Uranium-238	U-238	LA-508-471		0.18	.055	pCi/g	1	0.016		12/01/10

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 # WSCF103062

Sample # 103062013
SAF# F11-013
Sample ID B29B49

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
GEA Prep										**11/19/10**
GEA										
Cesium-137	10045-97-3	LA-508-481		0.48	.075	pCi/g	1	0.026		11/29/10
Cobalt-60	10198-40-0	LA-508-481	U	1.1E-4	.012	pCi/g	1	0.024		11/29/10
Europium-152	14683-23-9	LA-508-481		0.12	.046	pCi/g	1	0.10		11/29/10
Europium-154	15585-10-1	LA-508-481	U	0.015	.04	pCi/g	1	0.074		11/29/10
Europium-155	14391-16-3	LA-508-481	U	8.6E-3	.061	pCi/g	1	0.11		11/29/10
SR-89/90										**11/23/10**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.5	.93	pCi/g	1	0.37		12/02/10
Tc-99										**11/22/10**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	-0.22	.15	pCi/g	1	0.22		11/24/10
Th/Pu/Am/U Teva										**11/30/10**
AEA Am-U-Pu										
Americium-241	14596-10-2	LA-508-471	U	0.014	.025	pCi/g	1	0.045		12/02/10
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	3.5E-3	.008	pCi/g	1	0.016		12/02/10
Plutonium-239/240	PU-239/240	LA-508-471		0.087	.029	pCi/g	1	0.013		12/02/10

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 # WSCF103062

Sample # 103062013
SAF# F11-013
Sample ID B29B49

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.14	.039	pCi/g	1	4.2E-3		12/01/10
Uranium-235	15117-96-1	LA-508-471	U	3.8E-3	.005	pCi/g	1	0.016		12/01/10
Uranium-238	U-238	LA-508-471		0.11	.032	pCi/g	1	4.1E-3		12/01/10

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 # WSCF103062

Sample # 103062001
SAF# F11-013
Sample ID B29B37

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

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		92		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 # WSCF103062

Sample # 103062002
SAF# F11-013
Sample ID B29B38

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

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		93		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 # WSCF103062

Sample # 103062003
SAF# F11-013
Sample ID B29B39

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

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		93		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 # WSCF103062

Sample # 103062004
SAF# F11-013
Sample ID B29B40

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

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		93		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 # WSCF103062

Sample # 103062005
SAF# F11-013
Sample ID B29B41

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

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		91		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 # WSCF103062

Sample # 103062006
SAF# F11-013
Sample ID B29B42

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

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		91		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 # WSCF103062

Sample # 103062007
SAF# F11-013
Sample ID B29B43

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

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		94		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 # WSCF103062

Sample # 103062008
SAF# F11-013
Sample ID B29B44

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

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		95		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 # WSCF103062

Sample # 103062009
SAF# F11-013
Sample ID B29B45

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

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		95		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 # WSCF103062

Sample # 103062010
SAF# F11-013
Sample ID B29B46

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

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		93		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 # WSCF103062

Sample # 103062011
SAF# F11-013
Sample ID B29B47

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

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		94		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 # WSCF103062

Sample # 103062012
SAF# F11-013
Sample ID B29B48

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

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		92		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 # WSCF103062

Sample # 103062013
SAF# F11-013
Sample ID B29B49

Matrix SOIL
Sampled 11/18/10
Received 11/18/10

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		92		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 Inorganic

Group # WSCF103062

QC Batch 170120 **Test** ICP-2008 MS All possible metal
Associated Samples 103062001, 103062002, 103062003, 103062004, 103062005, 103062006, 103062007, 103062008, 103062009, 103062010, 103062011, 103062012, 103062013

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #42457**							
Manganese	7439-96-5		<0.10	ug/L					U	11/22/10
Antimony	7440-36-0		<0.30	ug/L					U	11/22/10
Barium	7440-39-3		<0.20	ug/L					U	11/22/10
Cadmium	7440-43-9		<0.10	ug/L					U	11/22/10
Chromium	7440-47-3		<0.50	ug/L					U	11/22/10
Zinc	7440-66-6		<0.80	ug/L					U	11/22/10
Lead	7439-92-1		<0.10	ug/L					U	11/22/10
Mercury	7439-97-6		<0.050	ug/L					U	11/22/10
Arsenic	7440-38-2		<0.40	ug/L					U	11/22/10
Thorium	7440-29-1		<0.10	ug/L					U	11/22/10
LCS			**QC Sample #42458**							
Manganese	7439-96-5		433	mg/kg	95.5	75 - 121				11/22/10
Antimony	7440-36-0		138	mg/kg	152.7	62 - 205				11/22/10
Barium	7440-39-3		300	mg/kg	93.9	78 - 118				11/22/10
Cadmium	7440-43-9		62.0	mg/kg	93.2	76 - 129				11/22/10
Chromium	7440-47-3		68.6	mg/kg	94.1	68 - 119				11/22/10
Zinc	7440-66-6		164	mg/kg	92.4	73 - 131				11/22/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF103062

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
Lead	7439-92-1		122	mg/kg	93.5	79 - 124					11/22/10
Mercury	7439-97-6		7.57	mg/kg	91.2	69 - 124					11/22/10
Arsenic	7440-38-2		129	mg/kg	98	79 - 125					11/22/10
Thorium	7440-29-1		387	mg/kg	96.8	79 - 109					11/22/10
MS			**QC Sample #42459**								
			Original 103062001								
Manganese	7439-96-5	454	-19.2	mg/kg	-19.2	70 - 130				X	11/22/10
Antimony	7440-36-0	<0.32	93.2	mg/kg	93.2	70 - 130					11/22/10
Barium	7440-39-3	85.7	67.1	mg/kg	67.1	70 - 130				N	11/22/10
Cadmium	7440-43-9	<0.11	98.0	mg/kg	98	70 - 130					11/22/10
Chromium	7440-47-3	6.11	95.9	mg/kg	95.9	70 - 130					11/22/10
Zinc	7440-66-6	47.3	94.0	mg/kg	94	70 - 130					11/22/10
Lead	7439-92-1	3.80	97.4	mg/kg	97.4	70 - 130					11/22/10
Mercury	7439-97-6	<0.054	1.92	mg/kg	96	70 - 130					11/22/10
Arsenic	7440-38-2	3.05	99.1	mg/kg	99.1	70 - 130					11/22/10
Thorium	7440-29-1	2.92	99.2	mg/kg	99.2	70 - 130					11/22/10
MSD			**QC Sample #42460**								
			Original 103062001						**Paired**	**42459**	
Manganese	7439-96-5	454	76.0	mg/kg	76	70 - 130	335.20	30	*	X	11/22/10
Antimony	7440-36-0	<0.32	91.5	mg/kg	91.5	70 - 130	1.80	30			11/22/10
Barium	7440-39-3	85.7	81.5	mg/kg	81.5	70 - 130	19.40	30			11/22/10
Cadmium	7440-43-9	<0.11	97.2	mg/kg	97.2	70 - 130	0.80	30			11/22/10
Chromium	7440-47-3	6.11	93.2	mg/kg	93.2	70 - 130	2.90	30			11/22/10
Zinc	7440-66-6	47.3	87.7	mg/kg	87.7	70 - 130	6.90	30			11/22/10
Lead	7439-92-1	3.80	97.6	mg/kg	97.6	70 - 130	0.20	30			11/22/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF103062

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Mercury	7439-97-6	<0.054	1.92	mg/kg	96	70 - 130	0.00	30		11/22/10
Arsenic	7440-38-2	3.05	104	mg/kg	104.3	70 - 130	5.10	30		11/22/10
Thorium	7440-29-1	2.92	98.4	mg/kg	98.4	70 - 130	0.80	30		11/22/10

Quality Control Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF103062

QC Batch 170446 **Test** PCBs by EPA SW-846 Method 8082
Associated Samples 103062001, 103062002, 103062003, 103062004, 103062005, 103062006, 103062007, 103062008, 103062009, 103062010, 103062011, 103062012, 103062013

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #42823**							
Aroclor-1016	12674-11-2		<4	ug/kg					U	12/01/10
Aroclor-1221	11104-28-2		<8	ug/kg					U	12/01/10
Aroclor-1232	11141-16-5		<4	ug/kg					U	12/01/10
Aroclor-1242	53469-21-9		<4	ug/kg					U	12/01/10
Aroclor-1248	12672-29-6		<4	ug/kg					U	12/01/10
Aroclor-1254	11097-69-1		<4	ug/kg					U	12/01/10
Aroclor-1260	11096-82-5		<4	ug/kg					U	12/01/10
Aroclor-1262	37324-23-5		<4	ug/kg					U	12/01/10
Aroclor-1268	11100-14-4		<4	ug/kg					U	12/01/10
LCS			**QC Sample #42824**							
Aroclor-1254	11097-69-1		86	ug/kg	107.3	75 - 128				12/01/10
MS			**QC Sample #42825**							
			Original 103062001							
Aroclor-1254	11097-69-1	<4	85	ug/kg	107.7	62 - 140				12/01/10
MSD			**QC Sample #42826**							
			Original 103062001					**Paired**	**42825**	
Aroclor-1254	11097-69-1	<4	85	ug/kg	107.3	62 - 140	0.40	30		12/01/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF103062

QC Batch 170517 **Test** Hexavalent chromium
Associated Samples 103062001, 103062002, 103062003, 103062004, 103062005, 103062006, 103062007, 103062008, 103062009, 103062010, 103062011, 103062012, 103062013

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #42985**								
Hexavalent chromium	18540-29-9		<0.099	ug/g						U	12/02/10
LCS			**QC Sample #42986**								
Hexavalent chromium	18540-29-9		3.89	ug/g	98.2	80 - 120					12/02/10
DUP			**QC Sample #42987**								
			Original 103062001								
Hexavalent chromium	18540-29-9	0.139	<0.11	ug/g			71.60	20	*	UX	12/02/10
MS			**QC Sample #42988**								
			Original 103062001								
Hexavalent chromium	18540-29-9	0.139	-0.0665	ug/g	-1.7	75 - 125				UN	12/02/10
PSTSPK			**QC Sample #42989**								
Hexavalent chromium	18540-29-9		0.0542	ug/g	101.9	85 - 115				U	12/02/10
IMS			**QC Sample #42990**								
			Original 103062001								
Hexavalent chromium	18540-29-9	0.139	320	ug/g	93.5	75 - 125				D	12/02/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

QC Batch 170075 **Test** Gamma Energy Analysis-general
Associated Samples 103062001, 103062002, 103062003, 103062004, 103062005, 103062006, 103062007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #42353**								
Cesium-137	10045-97-3		-3.3E-3	pCi/g						U	11/22/10
Cobalt-60	10198-40-0		0.0020	pCi/g						U	11/22/10
Europium-152	14683-23-9		6.5E-3	pCi/g						U	11/22/10
Europium-154	15585-10-1		-0.021	pCi/g						U	11/22/10
Europium-155	14391-16-3		0.027	pCi/g						U	11/22/10
LCS			**QC Sample #42354**								
Cesium-137	10045-97-3		6500	pCi/sample	107.1	80 - 120					11/22/10
Cobalt-60	10198-40-0		10000	pCi/sample	104.5	80 - 120					11/22/10
DUP			**QC Sample #42355**								
			Original 103070010								
Cesium-137	10045-97-3		0.075	pCi/g			23.10	-30 - 30			11/19/10
Cobalt-60	10198-40-0		-6.9E-3	pCi/g			-227.10	-30 - 30	*	U	11/19/10
Europium-152	14683-23-9		0.022	pCi/g			2466.70	-30 - 30	*	U	11/19/10
Europium-154	15585-10-1		-0.025	pCi/g			-96.80	-30 - 30	*	U	11/19/10
Europium-155	14391-16-3		0.013	pCi/g			27.50	-30 - 30		U	11/19/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

QC Batch 170076 **Test** Gamma Energy Analysis-general
Associated Samples 103062008, 103062009, 103062010, 103062011, 103062012, 103062013

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
IBLANK			**QC Sample #42356**								
Cesium-137	10045-97-3		-4.8E-3	pCi/g						U	11/29/10
Cobalt-60	10198-40-0		-1.6E-3	pCi/g						U	11/29/10
Europium-152	14683-23-9		0.032	pCi/g						U	11/29/10
Europium-154	15585-10-1		0.019	pCi/g						U	11/29/10
Europium-155	14391-16-3		0.043	pCi/g						U	11/29/10
LCS			**QC Sample #42357**								
Cesium-137	10045-97-3		6300	pCi/sample	104.9	80 - 120					11/29/10
Cobalt-60	10198-40-0		10000	pCi/sample	104.9	80 - 120					11/29/10
DUP			**QC Sample #42358**								
			Original 103062008								
Cesium-137	10045-97-3	0.093	0.091	pCi/g			2.30	-30 - 30			11/29/10
Cobalt-60	10198-40-0	0.010	-0.014	pCi/g			-1102.30	-30 - 30	*	U	11/29/10
Europium-152	14683-23-9	-0.013	-3.3E-3	pCi/g			-117.90	-30 - 30	*	U	11/29/10
Europium-154	15585-10-1	4.1E-3	-8.6E-3	pCi/g			-571.40	-30 - 30	*	U	11/29/10
Europium-155	14391-16-3	0.048	8.9E-3	pCi/g			137.10	-30 - 30	*	U	11/29/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

QC Batch 170130 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 103062001, 103062002, 103062003, 103062004, 103062005, 103062006, 103062007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #42494**							
Strontium-89/90	SR-RAD		-1.9	pCi/g					U	12/02/10
LCS			**QC Sample #42495**							
Strontium-89/90	SR-RAD		22	pCi/g	77.5	80 - 120			X	12/02/10
DUP			**QC Sample #42496**							
			Original 103062001							
Strontium-89/90	SR-RAD	-1.2	-1.6	pCi/g			-24.00	-30 - 30	U	12/02/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

QC Batch 170131 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 103062008, 103062009, 103062010, 103062011, 103062012, 103062013

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #42497**							
Strontium-89/90	SR-RAD		-0.30	pCi/g					U	12/02/10
LCS			**QC Sample #42498**							
Strontium-89/90	SR-RAD		24	pCi/g	84.7	80 - 120				12/02/10
DUP			**QC Sample #42499**							
			Original 103062008							
Strontium-89/90	SR-RAD	-2.3	-2.3	pCi/g			0.00	-30 - 30	U	12/02/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

QC Batch 170170 **Test** TC99 by Liquid Scintillation
Associated Samples 103062001, 103062002, 103062003, 103062004, 103062005, 103062006, 103062007, 103062008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #42563**							
Technetium-99	14133-76-7		-0.10	pCi/g					U	11/29/10
LCS			**QC Sample #42564**							
Technetium-99	14133-76-7		10	pCi/g	101.2	80 - 120				11/29/10
DUP			**QC Sample #42565**							
			Original 103062001							
Technetium-99	14133-76-7	-0.22	-0.22	pCi/g			0.00	-30 - 30	U	11/29/10
MS			**QC Sample #42566**							
			Original 103062001							
Technetium-99	14133-76-7	-0.22	38	pCi/g	99	75 - 125				11/29/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

QC Batch 170171 **Test** TC99 by Liquid Scintillation
Associated Samples 103062009, 103062010, 103062011, 103062012, 103062013

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #42567**							
Technetium-99	14133-76-7		-0.20	pCi/g					U	11/24/10
LCS			**QC Sample #42568**							
Technetium-99	14133-76-7		10	pCi/g	101.2	80 - 120				11/24/10
DUP			**QC Sample #42569**							
			Original 103062009							
Technetium-99	14133-76-7	-0.21	-0.21	pCi/g			0.00	-30 - 30	U	11/24/10
MS			**QC Sample #42570**							
			Original 103062009							
Technetium-99	14133-76-7	-0.21	36	pCi/g	90.7	75 - 125				11/24/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

QC Batch 170342 **Test** Americium/Curium (AEA)
Associated Samples 103062001, 103062002, 103062003, 103062004, 103062005, 103062006, 103062007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #42739**								
Americium-241	14596-10-2		9.6E-3	pCi/g						U	12/02/10
Plutonium-238	13981-16-3		1.5E-3	pCi/g						X	12/01/10
Uranium-234	U-233/234		0.017	pCi/g						X	12/01/10
Plutonium-239/240	PU-239/240		8.8E-3	pCi/g						U	12/01/10
Uranium-235	15117-96-1		0.011	pCi/g						U	12/01/10
Uranium-238	U-238		3.9E-3	pCi/g						U	12/01/10
LCS			**QC Sample #42740**								
Americium-241	14596-10-2		5.4	pCi/sample	96.6	80 - 120					12/02/10
Uranium-234	U-233/234		8.7	pCi/sample	106.6	80 - 120					12/01/10
Plutonium-239/240	PU-239/240		5.7	pCi/sample	98.8	80 - 120					12/01/10
DUP			**QC Sample #42741**								
			Original 103062001								
Plutonium-238	13981-16-3	1.8E-3	-1.7E-3	pCi/g						U	12/01/10
Americium-241	14596-10-2	1.9E-3	0.0020	pCi/g			16.20	-30 - 30		U	12/02/10
Plutonium-239/240	PU-239/240	0.013	1.7E-3	pCi/g			150.40	-30 - 30	*	U	12/01/10
Uranium-234	U-233/234	0.14	0.17	pCi/g			26.70	-30 - 30			12/01/10
Uranium-235	15117-96-1	0.19	0.016	pCi/g			167.30	-30 - 30	*	X	12/01/10
Uranium-238	U-238	4.2E-3	0.21	pCi/g			192.70	-30 - 30	*	X	12/01/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

QC Batch 170343 **Test** Plutonium (AEA)
Associated Samples 103062008, 103062009, 103062010, 103062011, 103062012, 103062013

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #42742**								
Plutonium-238	13981-16-3		3.7E-3	pCi/g						U	12/02/10
Americium-241	14596-10-2		0.030	pCi/g						U	12/02/10
Plutonium-239/240	PU-239/240		5.6E-3	pCi/g						U	12/02/10
Uranium-234	U-233/234		0.011	pCi/g						U	12/01/10
Uranium-235	15117-96-1		0.0060	pCi/g						U	12/01/10
Uranium-238	U-238		1.8E-3	pCi/g						U	12/01/10
LCS			**QC Sample #42743**								
Americium-241	14596-10-2		5.7	pCi/sample	103.6	80 - 120					12/02/10
Plutonium-239/240	PU-239/240		5.8	pCi/sample	100	80 - 120					12/02/10
Uranium-234	U-233/234		8.4	pCi/sample	103	80 - 120					12/01/10
DUP			**QC Sample #42744**								
			Original 103062008								
Americium-241	14596-10-2	3.6E-3	0.030	pCi/g			159.30	-30 - 30	*	U	12/02/10
Plutonium-238	13981-16-3	1.8E-3	3.1E-3	pCi/g			58.30	-30 - 30	*	U	12/02/10
Uranium-234	U-233/234	0.17	0.10	pCi/g			46.20	-30 - 30	*	X	12/01/10
Plutonium-239/240	PU-239/240	0.014	0.012	pCi/g			8.00	-30 - 30		X	12/02/10
Uranium-235	15117-96-1	6.5E-3	3.4E-3	pCi/g			58.30	-30 - 30	*	UX	12/01/10
Uranium-238	U-238	0.17	0.16	pCi/g			0.00	-30 - 30			12/01/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

QC Batch 170130 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 103062001, 103062002, 103062003, 103062004, 103062005, 103062006, 103062007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #103062001**							
Strontium-85	13967-73-2				83.6	25 - 105				12/02/10
SAMPLE			**Sample #103062002**							
Strontium-85	13967-73-2				92.5	25 - 105				12/02/10
SAMPLE			**Sample #103062003**							
Strontium-85	13967-73-2				83.4	25 - 105				12/02/10
SAMPLE			**Sample #103062004**							
Strontium-85	13967-73-2				86.2	25 - 105				12/02/10
SAMPLE			**Sample #103062005**							
Strontium-85	13967-73-2				82.9	25 - 105				12/02/10
SAMPLE			**Sample #103062006**							
Strontium-85	13967-73-2				86.4	25 - 105				12/02/10
SAMPLE			**Sample #103062007**							
Strontium-85	13967-73-2				82.9	25 - 105				12/02/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #42494**							
Strontium-85	13967-73-2				83.6	25 - 105				12/02/10
LCS			**QC Sample #42495**							
Strontium-85	13967-73-2				84.9	25 - 105				12/02/10
DUP			**QC Sample #42496**							
			Original 103062001							
Strontium-85	13967-73-2				86.2	25 - 105	4.30			12/02/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

QC Batch 170131 **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 103062008, 103062009, 103062010, 103062011, 103062012, 103062013

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #103062008**							
Strontium-85	13967-73-2				87.9	25 - 105				12/02/10
SAMPLE			**Sample #103062009**							
Strontium-85	13967-73-2				87.1	25 - 105				12/02/10
SAMPLE			**Sample #103062010**							
Strontium-85	13967-73-2				93.5	25 - 105				12/02/10
SAMPLE			**Sample #103062011**							
Strontium-85	13967-73-2				81.7	25 - 105				12/02/10
SAMPLE			**Sample #103062012**							
Strontium-85	13967-73-2				95.3	25 - 105				12/02/10
SAMPLE			**Sample #103062013**							
Strontium-85	13967-73-2				86	25 - 105				12/02/10
BLANK			**QC Sample #42497**							
Strontium-85	13967-73-2				80.2	25 - 105				12/02/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
LCS			**QC Sample #42498**							
Strontium-85	13967-73-2				93.8	25 - 105				12/02/10
DUP			**QC Sample #42499**							
			Original 103062008							
Strontium-85	13967-73-2				91.7	25 - 105	3.90			12/02/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

QC Batch 170342 **Test** Uranium (AEA)
Associated Samples 103062001, 103062002, 103062003, 103062004, 103062005, 103062006, 103062007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #103062001**							
Uranium-232 Tracer	14158-29-3				79.8	25 - 105				12/01/10
Americium-243 Tracer	14993-75-0				93.2	25 - 105				12/02/10
Plutonium-242 Tracer	13982-10-0				79.2	25 - 105				12/01/10
SAMPLE			**Sample #103062002**							
Uranium-232 Tracer	14158-29-3				83.1	25 - 105				12/01/10
Americium-243 Tracer	14993-75-0				89.9	25 - 105				12/02/10
Plutonium-242 Tracer	13982-10-0				87.4	25 - 105				12/01/10
SAMPLE			**Sample #103062003**							
Uranium-232 Tracer	14158-29-3				77.9	25 - 105				12/01/10
Americium-243 Tracer	14993-75-0				83.9	25 - 105				12/02/10
Plutonium-242 Tracer	13982-10-0				71.8	25 - 105				12/01/10
SAMPLE			**Sample #103062004**							
Uranium-232 Tracer	14158-29-3				80	25 - 105				12/01/10
Americium-243 Tracer	14993-75-0				85.4	25 - 105				12/02/10
Plutonium-242 Tracer	13982-10-0				71.2	25 - 105				12/01/10
SAMPLE			**Sample #103062005**							

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Uranium-232 Tracer	14158-29-3				82.6	25 - 105				12/01/10
Americium-243 Tracer	14993-75-0				87.3	25 - 105				12/02/10
Plutonium-242 Tracer	13982-10-0				84.1	25 - 105				12/02/10
SAMPLE			**Sample #103062006**							
Uranium-232 Tracer	14158-29-3				75.1	25 - 105				12/01/10
Americium-243 Tracer	14993-75-0				83.7	25 - 105				12/02/10
Plutonium-242 Tracer	13982-10-0				74	25 - 105				12/02/10
SAMPLE			**Sample #103062007**							
Uranium-232 Tracer	14158-29-3				81.9	25 - 105				12/01/10
Americium-243 Tracer	14993-75-0				88.4	25 - 105				12/02/10
Plutonium-242 Tracer	13982-10-0				69.6	25 - 105				12/02/10
BLANK			**QC Sample #42739**							
Uranium-232 Tracer	14158-29-3				87	25 - 105				12/01/10
Americium-243 Tracer	14993-75-0				85	25 - 105				12/02/10
Plutonium-242 Tracer	13982-10-0				93.4	25 - 105				12/01/10
LCS			**QC Sample #42740**							
Uranium-232 Tracer	14158-29-3				54.1	25 - 105				12/01/10
Americium-243 Tracer	14993-75-0				93.7	25 - 105				12/02/10
Plutonium-242 Tracer	13982-10-0				85.3	25 - 105				12/01/10
DUP			**QC Sample #42741**							
			Original 103062001							
Uranium-232 Tracer	14158-29-3				87.4	25 - 105	2.50			12/01/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Americium-243 Tracer	14993-75-0				82.6	25 - 105	2.40			12/02/10
Plutonium-242 Tracer	13982-10-0				76.1	25 - 105	1.60			12/01/10

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

QC Batch 170343 **Test** Uranium (AEA)
Associated Samples 103062008, 103062009, 103062010, 103062011, 103062012, 103062013

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #103062008**							
Uranium-232 Tracer	14158-29-3				85.3	25 - 105				12/01/10
Americium-243 Tracer	14993-75-0				91.4	25 - 105				12/02/10
Plutonium-242 Tracer	13982-10-0				81.2	25 - 105				12/02/10
SAMPLE			**Sample #103062009**							
Uranium-232 Tracer	14158-29-3				89.7	25 - 105				12/01/10
Americium-243 Tracer	14993-75-0				96.9	25 - 105				12/02/10
Plutonium-242 Tracer	13982-10-0				87	25 - 105				12/02/10
SAMPLE			**Sample #103062010**							
Uranium-232 Tracer	14158-29-3				84	25 - 105				12/01/10
Americium-243 Tracer	14993-75-0				93.8	25 - 105				12/02/10
Plutonium-242 Tracer	13982-10-0				80.3	25 - 105				12/02/10
SAMPLE			**Sample #103062011**							
Uranium-232 Tracer	14158-29-3				89.1	25 - 105				12/01/10
Americium-243 Tracer	14993-75-0				96.5	25 - 105				12/02/10
Plutonium-242 Tracer	13982-10-0				88.4	25 - 105				12/02/10
SAMPLE			**Sample #103062012**							

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF103062

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Uranium-232 Tracer	14158-29-3				79.2	25 - 105				12/01/10
Americium-243 Tracer	14993-75-0				84.6	25 - 105				12/02/10
Plutonium-242 Tracer	13982-10-0				74.2	25 - 105				12/02/10
SAMPLE			**Sample #103062013**							
Uranium-232 Tracer	14158-29-3				86.3	25 - 105				12/01/10
Americium-243 Tracer	14993-75-0				90.6	25 - 105				12/02/10
Plutonium-242 Tracer	13982-10-0				76.1	25 - 105				12/02/10
BLANK			**QC Sample #42742**							
Uranium-232 Tracer	14158-29-3				89.2	25 - 105				12/01/10
Americium-243 Tracer	14993-75-0				82.4	25 - 105				12/02/10
Plutonium-242 Tracer	13982-10-0				87.9	25 - 105				12/02/10
LCS			**QC Sample #42743**							
Uranium-232 Tracer	14158-29-3				70.8	25 - 105				12/01/10
Americium-243 Tracer	14993-75-0				86	25 - 105				12/02/10
Plutonium-242 Tracer	13982-10-0				84.8	25 - 105				12/02/10
DUP			**QC Sample #42744**							
			Original	**103062008**						
Uranium-232 Tracer	14158-29-3				94.2	25 - 105	8.20			12/01/10
Americium-243 Tracer	14993-75-0				91.8	25 - 105	7.80			12/02/10
Plutonium-242 Tracer	13982-10-0				76.3	25 - 105	7.00			12/02/10

Quality Control Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF103062

QC Batch 170446 **Test** PCBs by EPA SW-846 Method 8082
Associated Samples 103062001, 103062002, 103062003, 103062004, 103062005, 103062006, 103062007, 103062008, 103062009, 103062010, 103062011, 103062012, 103062013

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #103062001**							
Tetrachloro-m-xylene	877-09-8				82.1	60 - 140				12/01/10
Decachlorobiphenyl	2051-24-3				83.9	60 - 140				12/01/10
SAMPLE			**Sample #103062002**							
Tetrachloro-m-xylene	877-09-8				86.5	60 - 140				12/01/10
Decachlorobiphenyl	2051-24-3				86.9	60 - 140				12/01/10
SAMPLE			**Sample #103062003**							
Tetrachloro-m-xylene	877-09-8				82.2	60 - 140				12/01/10
Decachlorobiphenyl	2051-24-3				84.1	60 - 140				12/01/10
SAMPLE			**Sample #103062004**							
Tetrachloro-m-xylene	877-09-8				81.2	60 - 140				12/01/10
Decachlorobiphenyl	2051-24-3				82.8	60 - 140				12/01/10
SAMPLE			**Sample #103062005**							
Tetrachloro-m-xylene	877-09-8				87.3	60 - 140				12/01/10
Decachlorobiphenyl	2051-24-3				86.5	60 - 140				12/01/10

Quality Control Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF103062

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #103062006**							
Tetrachloro-m-xylene	877-09-8				87.4	60 - 140				12/01/10
Decachlorobiphenyl	2051-24-3				87.6	60 - 140				12/01/10
SAMPLE			**Sample #103062007**							
Tetrachloro-m-xylene	877-09-8				86	60 - 140				12/01/10
Decachlorobiphenyl	2051-24-3				84	60 - 140				12/01/10
SAMPLE			**Sample #103062008**							
Tetrachloro-m-xylene	877-09-8				87.3	60 - 140				12/01/10
Decachlorobiphenyl	2051-24-3				85.3	60 - 140				12/01/10
SAMPLE			**Sample #103062009**							
Tetrachloro-m-xylene	877-09-8				86.5	60 - 140				12/01/10
Decachlorobiphenyl	2051-24-3				88.3	60 - 140				12/01/10
SAMPLE			**Sample #103062010**							
Tetrachloro-m-xylene	877-09-8				88.1	60 - 140				12/01/10
Decachlorobiphenyl	2051-24-3				88.1	60 - 140				12/01/10
SAMPLE			**Sample #103062011**							
Tetrachloro-m-xylene	877-09-8				83.7	60 - 140				12/01/10
Decachlorobiphenyl	2051-24-3				85.6	60 - 140				12/01/10
SAMPLE			**Sample #103062012**							

Quality Control Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF103062

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Tetrachloro-m-xylene	877-09-8				85.5	60 - 140				12/01/10
Decachlorobiphenyl	2051-24-3				85.2	60 - 140				12/01/10
SAMPLE			**Sample #103062013**							
Tetrachloro-m-xylene	877-09-8				85	60 - 140				12/01/10
Decachlorobiphenyl	2051-24-3				82.6	60 - 140				12/01/10
BLANK			**QC Sample #42823**							
Tetrachloro-m-xylene	877-09-8				82.8	60 - 140				12/01/10
Decachlorobiphenyl	2051-24-3				84.9	60 - 140				12/01/10
LCS			**QC Sample #42824**							
Tetrachloro-m-xylene	877-09-8				81.4	60 - 124				12/01/10
Decachlorobiphenyl	2051-24-3				87.5	72 - 125				12/01/10
MS			**QC Sample #42825**							
			Original	**103062001**						
Tetrachloro-m-xylene	877-09-8				82.2	51 - 120				12/01/10
Decachlorobiphenyl	2051-24-3				84.8	66 - 126				12/01/10
MSD			**QC Sample #42826**							
			Original	**103062001**				**Paired**	**42825**	
Tetrachloro-m-xylene	877-09-8				84.1	51 - 120	2.30			12/01/10
Decachlorobiphenyl	2051-24-3				85.5	66 - 126	0.80			12/01/10

Attention: Michael Neely

Group # WSCF103062

Quality Control Comments

Department Inorganic

42459 B29B37(103062001MS)

Analyte Manganese - ICP-2008 MS All possible metal

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

42460 B29B37(103062001MSD)

Analyte Manganese - ICP-2008 MS All possible metal

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

42987 B29B37(103062001DUP)

Analyte Hexavalent chromium - Hexavalent chromium

[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.

Attention: Michael Neely

Group # WSCF103062

Quality Control Comments

Department Radiochemistry

42495 LCS for HBN 170130 [RADP/4226]

Analyte Strontium-89/90 - Strontium 89/90 (GPC/GEA)

[1] The LCS is low but still within range of the statement of work that allows 70-130%. LMK

42739 BLANK for HBN 170342 [RADP/424

Analyte Plutonium-238 - Plutonium (AEA)

[1] The blank is less than 2X the MDC and is acceptable.

Analyte Uranium-234 - Uranium (AEA)

[1] The blank is less than 2X the MDC and is acceptable.

42741 B29B37(103062001DUP)

Analyte Uranium-235 - Uranium (AEA)

[1] Duplicate RPD out-of-limits. RPD limit does not apply to results near the Minimum Detectable Concentration.

Analyte Uranium-238 - Uranium (AEA)

[1] Duplicate RPD out-of-limits. RPD limit does not apply to results near the Minimum Detectable Concentration.

42744 B29B44(103062008DUP)

Analyte Plutonium-239/240 - Plutonium (AEA)

[1] Duplicate RPD out-of-limits. RPD limit does not apply to results near the Minimum Detectable Concentration.

Analyte Uranium-234 - Uranium (AEA)

[1] The U-234 dup is flagged for poor RPD due to the heterogeneous nature of the sample. LMK

Analyte Uranium-235 - Uranium (AEA)

[1] The U-234 dup is flagged for poor RPD due to the heterogeneous nature of the sample. LMK

ATTACHMENT4

SAMPLE RECEIPT

Consisting of 29 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 #: 401352ES20
Work Order #: 103062
Profile #: F11-013-016
Proj. Mgr.:
Phone:

The following samples were received from you on 11/18/2010 2:15:00 PM. 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		
103062001	B29B37	SOIL	11/18/2010 11:34	11/18/2010 14:15
		2008-S; AEA-AM-S; AEA-PU-S; AEA-U-S; CR6-S; DRY-WEIGHT; GEA-S; PCB-SA; SR89/90-S; TC99-S		
103062002	B29B38	SOIL	11/18/2010 11:42	11/18/2010 14:15
		2008-S; AEA-AM-S; AEA-PU-S; AEA-U-S; CR6-S; DRY-WEIGHT; GEA-S; PCB-SA; SR89/90-S; TC99-S		
103062003	B29B39	SOIL	11/18/2010 11:52	11/18/2010 14:15
		2008-S; AEA-AM-S; AEA-PU-S; AEA-U-S; CR6-S; DRY-WEIGHT; GEA-S; PCB-SA; SR89/90-S; TC99-S		
103062004	B29B40	SOIL	11/18/2010 12:04	11/18/2010 14:15
		2008-S; AEA-AM-S; AEA-PU-S; AEA-U-S; CR6-S; DRY-WEIGHT; GEA-S; PCB-SA; SR89/90-S; TC99-S		
103062005	B29B41	SOIL	11/18/2010 10:55	11/18/2010 14:15
		2008-S; AEA-AM-S; AEA-PU-S; AEA-U-S; CR6-S; DRY-WEIGHT; GEA-S; PCB-SA; SR89/90-S; TC99-S		
103062006	B29B42	SOIL	11/18/2010 11:05	11/18/2010 14:15
		2008-S; AEA-AM-S; AEA-PU-S; AEA-U-S; CR6-S; DRY-WEIGHT; GEA-S; PCB-SA; SR89/90-S; TC99-S		
103062007	B29B43	SOIL	11/18/2010 10:48	11/18/2010 14:15
		2008-S; AEA-AM-S; AEA-PU-S; AEA-U-S; CR6-S; DRY-WEIGHT; GEA-S; PCB-SA; SR89/90-S; TC99-S		
103062008	B29B44	SOIL	11/18/2010 12:14	11/18/2010 14:15
		2008-S; AEA-AM-S; AEA-PU-S; AEA-U-S; CR6-S; DRY-WEIGHT; GEA-S; PCB-SA; SR89/90-S; TC99-S		
103062009	B29B45	SOIL	11/18/2010 12:14	11/18/2010 14:15

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

		2008-S; AEA-AM-S; AEA-PU-S; AEA-U-S; CR6-S; DRY-WEIGHT; GEA-S; PCB-SA; SR89/90-S; TC99-S		
103062010	B29B46	SOIL	11/18/2010 11:13	11/18/2010 14:15
		2008-S; AEA-AM-S; AEA-PU-S; AEA-U-S; CR6-S; DRY-WEIGHT; GEA-S; PCB-SA; SR89/90-S; TC99-S		
103062011	B29B47	SOIL	11/18/2010 11:22	11/18/2010 14:15
		2008-S; AEA-AM-S; AEA-PU-S; AEA-U-S; CR6-S; DRY-WEIGHT; GEA-S; PCB-SA; SR89/90-S; TC99-S		
103062012	B29B48	SOIL	11/18/2010 11:30	11/18/2010 14:15
		2008-S; AEA-AM-S; AEA-PU-S; AEA-U-S; CR6-S; DRY-WEIGHT; GEA-S; PCB-SA; SR89/90-S; TC99-S		
103062013	B29B49	SOIL	11/18/2010 11:55	11/18/2010 14:15
		2008-S; AEA-AM-S; AEA-PU-S; AEA-U-S; CR6-S; DRY-WEIGHT; GEA-S; PCB-SA; SR89/90-S; TC99-S		

Test Acronym Description

Test Acronym	Description
2008-S	ICP-MS (S)
AEA-AM-S	Americium (AEA) (S)
AEA-PU-S	Plutonium (AEA) (S)
AEA-U-S	Uranium Isotopic (AEA) (S)
CR6-S	Cr6 (S)
DRY-WEIGHT	Dry Weight as Pct Moisture
GEA-S	Gamma Energy Analysis (S)
PCB-SA	PCB (8082) (S) ASE
SR89/90-S	Strontium 89/90 (GPC) (S)
TC99-S	Technetium-99 (S)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-013-016	PAGE 1 OF 2
COLLECTOR: KB Hulse CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 13 Days
SAMPLING LOCATION: 600-286 V-1	PROJECT DESIGNATION: ARRA 600-286-PL - Soil		SAF NO.: F11-013	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-16.4	ACTUAL SAMPLE DEPTH: 0-12 inches	COA: 302222ES10	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, 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: 103062

PRESERVATION	Cool-4C	Cool-4C	Cool-4C	None	None
HOLDING TIME	28 Days	30 Days	1 yr/1 yr	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	AG	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	120mL	60mL	250mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Chlorine (Br - 7196 Bromine Chloride)	See ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (4) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
829837	SOIL	NOV 18 2010	1134	X	X	X	X	X

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: KB Hulse CHPRC	DATE/TIME: NOV 18 2010 1415	RECEIVED BY/STORED IN: [signature]	DATE/TIME: NOV 18 2010 1415	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
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	

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

A-6003-612 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-013-016	PAGE 2 OF 2
COLLECTOR: KB Hulse CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 600-286 V-1	PROJECT DESIGNATION: ARRA 600-286-PL - Soil		SAF NO.: F11-013	AIR QUALITY: C	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-607-16-4	ACTUAL SAMPLE DEPTH: 0-12 inches	COA: 302222ES10	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 CACN for all analytical work at WSCF is 401352ES20.
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

* The laboratory shall report only the requested constituents of concern in all final data reports, and EDDs. QC results for non-requested constituents need not be reported, but samples chosen for matrix spike, and all spike compounds shall be identified in the final data report case narrative. No TICs shall be reported.
(1) 200.8 HG - ICPMS {Mercury}; ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Manganese, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Lead, Thorium};
(2) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor 1232, Aroclor-1242, Aroclor 1248, Aroclor-1254, Aroclor 1260, Aroclor-1262, Aroclor 1268};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(4) Americium-241 {Americium-241}; Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium 233/234, Uranium-235, Uranium-238}; Strontium 89,90 – Total Sr {Total beta radiostrontium}; Technetium-99 {Technetium-99};

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-013-017	PAGE 1 OF 2
COLLECTOR: KB Hulse CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2658	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: BC	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 600-286 V-2	PROJECT DESIGNATION: ARRA 600-286-PL - Soil		SAF NO.: F11-013	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-16.4	ACTUAL SAMPLE DEPTH: 0-12 inches	COA: 30122ZE510	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; 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 Reg defines that are not relevantio per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool-4C	Cool-4C	Cool-4C	None	None
HOLDING TIME	28 Days	28 Days	1 yr/1 yr	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	aG	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	120mL	60mL	250mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7199 (Hexavalent Chromium)	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (4) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B29B38 002	SOIL	NOV 18 2010	1142	X	X	X	X	X

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: KB Hulse CHPRC	DATE/TIME: NOV 18 2010 1145	RECEIVED BY/STORED IN:	DATE/TIME: NOV 18 2010 1145	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
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	

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

A-5802-518 (REV. 2)

CH2MHILL Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-013-017	PAGE 2 OF 2
COLLECTOR: KB Hulse, CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-7858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: RC	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 600-286 V-7	PROJECT DESIGNATION: ARRA 600-286-PL - Soil		SAF NO.: F11-013	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-807-No-4	ACTUAL SAMPLE DEPTH: 0-12 inches	COA: 302222ES10	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 CACN for all analytical work at WSCF is 401352ES20.
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

* The laboratory shall report only the requested constituents of concern in all final data reports, and EDDs. QC results for non-requested constituents need not be reported, but samples chosen for matrix spike, and all spike compounds shall be identified in the final data report case narrative. No TICs shall be reported.
(1) 200.8_HG - ICPMS {Mercury}: ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Manganese, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Lead, Thorium};
(2) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260, Aroclor-1262, Aroclor-1268};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(4) Americium-241 {Americium-241}; Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235, Uranium-238}; Strontium-89,90 -- Total Sr {Total beta radiostrontium}; Technetium-99 {Technetium-99};

A-6023-518 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F11-013-018	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE	DATA TURNAROUND
KB Hulse CHPRC	WIDRIG, DL	376-2858	WIDRIG, DL	8C	15 Days / 15 Days

SAMPLING LOCATION	PROJECT DESIGNATION	SAF NO.	AIR QUALITY
600-286 V-3	ARRA 600-286-PL - Soil	F11-013	☐

ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT
N/A	HNF-N-507-164	0-12 inches	302222ES10	GOVERNMENT VEHICLE

SHIPPED TO	OFFSITE PROPERTY NO.	BILL OF LADING/AIR BILL NO.
Waste Sampling & Characterization	N/A	N/A

MATRIX*: A=Air, DL=Drum Liq/Ads, 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	Cool~4C	None	None
HOLDING TIME	28 Days	30 Days	1 yr/1 yr	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	PG	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	120ml	60mL	250ml	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196 (Hexavalent Chromium)	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (4) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B29B39 C-3	SOIL	NOV 18 2010	1152	X	X	X	X	X

CHAIN OF POSSESSION		SIGN/ PRINT NAME		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: KB Hulse CHPRC	DATE/TIME: NOV 18 2010 1415	RECEIVED BY/STORED IN: [illegible]	DATE/TIME: NOV 18 2010 1415	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
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	

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

A-6005-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			P11-013-018	PAGE 2 OF 2
COLLECTOR KB Hulse CHPRC	COMPANY CONTACT WEDRIG, DL	TELEPHONE NO. 376-2858	PROJECT COORDINATOR WEDRIG, DL	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 600-286 V-3	PROJECT DESIGNATION ARRA 600-286-PL - Soil		SAF NO. P11-013	AIR QUALITY ☐	
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-807-16-4	ACTUAL SAMPLE DEPTH 0-12 inches	COA 302222ES10	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 CACN for all analytical work at WSCF is 401352E520.
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

* The laboratory shall report only the requested constituents of concern in all final data reports, and EDDs. QC results for non-requested constituents need not be reported, but samples chosen for matrix spike, and all spike compounds shall be identified in the final data report case narrative. No TICs shall be reported.
(1) 200.8_HG - ICPMS {Mercury}; ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Manganese, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Lead, Thorium};
(2) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260, Aroclor-1262, Aroclor-1268};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(4) Americium-241 {Americium-241}; Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235, Uranium-238}; Strontium-89,90 -- Total Sr {Total beta radiostrontium}; Technetium-99 {Technetium-99};

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | F11-013-019 | PAGE 1 OF 2

COLLECTOR: KB Hulse CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2859	PROJECT COORDINATOR: WIDRIG, DL
SAMPLING LOCATION: 600-285 V-4	PROJECT DESIGNATION: ARRA 600-286-PL - Soil		SAP NO.: F11-013
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-16-4	ACTUAL SAMPLE DEPTH: 0-12 inches	COA: 302222ESIC
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: RC | AIR QUALITY: ☐ | DATA TURNAROUND: 15 Days / 15 Days | METHOD OF SHIPMENT: GOVERNMENT VEHICLE

MATRIX*: A=Air, OL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, O=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	Cooled*	Cooled*	Cooled*	None	None
HOLDING TIME	28 Days	30 Days	1 yr/1 yr	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	AG	Squeeze Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	120mL	60mL	250mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Chromium, Hex - 7196 (Hexavalent Chromium)	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (4) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B29B40 04	SOIL	NOV 18 2010	1204	✓	✓	✓	✓	✓

CHAIN OF POSSESSION — SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
KB Hulse CHPRC	NOV 18 2010 1414		NOV 18 2010 1415

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION: RECEIVED BY | TITLE | DATE/TIME

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

A 6000 615 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-013-019	PAGE 2 OF 2
COLLECTOR KB Hulse CHPRC	COMPANY CONTACT WIDRIG, DL	TELEPHONE NO. 376 2858	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE BC	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 600-286 V-4	PROJECT DESIGNATION ARRA 600 286 PL Soil		SAF NO. F11-013	AIR QUALITY ☐	
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-807-16.4	ACTUAL SAMPLE DEPTH 0-12 inches	COA 3022226510	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 CACN for all analytical work at WSCF is 401352ES20.
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

* The laboratory shall report only the requested constituents of concern in all final data reports, and EDDs. QC results for non-requested constituents need not be reported, but samples chosen for matrix spike, and all spike compounds shall be identified in the final data report case narrative. No TICs shall be reported.
(1) 200.8_HG - ICPMS (Mercury); ICP/MS - 200.8 (TAL) (Antimony, Barium, Cadmium, Chromium, Manganese, Zinc); ICP/MS - 200.8 (Add-on) (Arsenic, Lead, Thorium);
(2) PCBs - 8082 (Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260, Aroclor-1262, Aroclor-1268);
(3) Gamma Spectroscopy (Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155);
(4) Americium-241 (Americium-241); Isotopic Plutonium (Plutonium-238, Plutonium-239/240); Isotopic Uranium (Uranium-233/234, Uranium-235, Uranium-238); Strontium-89,90 -- Total Sr (Total beta radiostrontium); Technetium-99 (Technetium-99);

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-013-020	PAGE 1 OF 2
COLLECTOR: KC Patterson, CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 600-286 Y-5	PROJECT DESIGNATION: ARRA 600-286-PL - Soil		SAF NO.: F11-013	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-607-16 4	ACTUAL SAMPLE DEPTH: 0-12 inches	COA: 30222 28510	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=Solid, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at contaminations 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	Cool<4C	None	None
HOLDING TIME	28 Days	30 Days	1 yr/1 yr	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	aG	Stamp Bottle Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	120mL	60mL	250mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196 (Hexavalent Chromium);	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (4) IN SPECIAL INSTRUCTIONS

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME					
B29B41	003	SOIL	NOV 18 2010	1055	X	X	X	X	X

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: KC Patterson CHPRC	DATE/TIME: NOV 18 2010 1415	RECEIVED BY/STORED IN: [signature]	DATE/TIME: NOV 18 2010 1415
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

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

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-013-020	PAGE 2 OF 2
COLLECTOR: KC Patterson CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: BC	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 600-286 V-5	PROJECT DESIGNATION: ARRA 600-286-PL - S&B		SAF NO.: F11-013	AIR QUALITY:	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-16.4	ACTUAL SAMPLE DEPTH: 0-12 inches	COA: 302727PS10	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 CACN for all analytical work at WSCF is 401352ES20.
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

* The laboratory shall report only the requested constituents of concern in all final data reports, and EDDs. QC results for non-requested constituents need not be reported, but samples chosen for matrix spike, and all spike compounds shall be identified in the final data report case narrative. No TICs shall be reported.
(1) 200.8_HG - ICPMS {Mercury}; ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Manganese, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Lead, Thorium};
(2) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260, Aroclor-1262, Aroclor-1268};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(4) Americium-241 {Americium-241}; Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235, Uranium-238}; Strontium-89,90 -- Total Sr {Total beta radiostrontium}; Technetium-99 {Technetium-99};

A 6003 628 (REV 2)

Thursday, November 18, 2010 7:37:30 PM
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ChemWare

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-913-021	PAGE 1 OF 2
COLLECTOR: RC Patterson, CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2836	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8K	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 600-285 V-6	PROJECT DESIGNATION: ARRA 600-286-PL - Soil		SAF NO.: F11-013	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-607-16.4	ACTUAL SAMPLE DEPTH: 0-12 inches	COA: 30222 (CS1/)	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, SE=Sediment, T=Tissue, V=Vegetation, W=Water, W/I=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 Regulators but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool<4C	Cool<4C	Cool<4C	None	None
HOLDING TIME	28 Days	30 Days	1 yr/1 yr	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	BG	Sterile Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	120ml	60mL	250 ml	500ml	120mL
SAMPLE ANALYSIS	See Item (1) in Special Instructions	Cleanroom Non-VOA (Volatiles) Cleanroom	See Item (1) in Special Instructions	See Item (1) in Special Instructions	See Item (1) in Special Instructions

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B29R42	SOIL	NOV 18 2010	1105	X	X	X	X	X

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: RC Patterson	DATE/TIME: NOV 18 2010 1115	RECEIVED BY/STORED IN: [signature]	DATE/TIME: NOV 18 2010 1115
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

☐ ORIGINAL

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

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			P11-013-021	PAGE 2 OF 2
COLLECTOR KG Patterson GHPRC	COMPANY CONTACT WIDRIG, DL	TELEPHONE NO. 376-2858	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 600-286 V-6	PROJECT DESIGNATION ARRA 600-286-PL - Soil		SAF NO. P11-013		
ICE CHEST NO. N/A	FIELD LOGBOOK NO. ~~HNF-N-507-~~116-4	ACTUAL SAMPLE DEPTH 0/12 inches	COA 302222ES10	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 CACN for all analytical work at WSCF is 9U1352ES20.
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

* The laboratory shall report only the requested constituents of concern in all final data reports, and EDDs. QC results for non-requested constituents need not be reported, but samples chosen for matrix spike, and all spike compounds shall be identified in the final data report case narrative. No TICs shall be reported.
(1) 200.8_HG - ICPMS {Mercury}; ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Manganese, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Lead, Thorium};
(2) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260, Aroclor-1262, Aroclor-1268};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(4) Americium-241 {Americium-241}; Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235, Uranium-238}; Strontium-89,90 – Total Sr {Total beta radiostrontium}; Technetium-99 {Technetium-99};

D 3H

A-6000-010 (REV 1)

CH2M HILL Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-013-022	PAGE 1 OF 2
COLLECTOR: KC Patterson CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 600 286 V 7	PROJECT DESIGNATION: ARRA 600 286 PL - Soil		SAF NO.: F11-013	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-16.4	ACTUAL SAMPLE DEPTH: 0-12 inches	COA: 302222ES1C	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, OL=Oil, Liquid, DG=Drum, Solid, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, D=Drum)	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)	PRESERVATION	Cool-4C	Cool-4C	Cool-4C	None	None
		HOLDING TIME	28 Days	30 Days	1 yr/1 yr	6 Months	6 Months
		TYPE OF CONTAINER	G/P	G/P	eG	Square Bottle - Poly	G/P
		NO. OF CONTAINER(S)	1	1	1	1	1
		VOLUME	120mL	60mL	250mL	500mL	120mL
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196 (requested Chromium)	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (4) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B20B43	SOIL	NOV 18 2010	1048	X	X	X	X	X

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: KC Patterson CHPRC	DATE/TIME: NOV 18 2010 1415	RECEIVED BY/STORED IN: [signature]	DATE/TIME: NOV 18 2010 1415	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

A-6005-018 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-013.022	PAGE 2 OF 2
COLLECTOR: KC Patterson CH2RC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2855	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 600-285 V-7	PROJECT DESIGNATION: ARRA 600-285-PL - Soil		SAF NO.: F11-013	AIR QUALITY: L	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-607-16-4	ACTUAL SAMPLE DEPTH: 0-12 inches	COA: 302227ES10	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 CALN for all analytical work at WSCF is 401352ES20.
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

* The laboratory shall report only the requested constituents of concern in all final data reports, and EDDs. QC results for non-requested constituents need not be reported, but samples chosen for matrix spike, and all spike compounds shall be identified in the final data report case narrative. No TICs shall be reported.
(1) 200.8_HG - ICPMS (Mercury); ICP/MS - 200.8 (TAL) (Antimony, Barium, Cadmium, Chromium, Manganese, Zinc); ICP/MS - 200.8 (Add-on) (Arsenic, Lead, Thorium);
(2) PCBs - 8082 (Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260, Aroclor-1262, Aroclor-1268);
(3) Gamma Spectroscopy (Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155);
(4) Americium-241 (Americium-241); Isotopic Plutonium (Plutonium-238, Plutonium-239/240); Isotopic Uranium (Uranium-233/234, Uranium-235, Uranium-238); Strontium-89,90 – Total Sr (Total beta radiostrontium); Technetium-99 (Technetium-99);

A-6023-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-013-023	PAGE 1 OF 2
COLLECTOR: KC Patterson CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2859	PROJECT COORDINATOR: WIDRIG, DI	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 600-286 V-8	PROJECT DESIGNATION: ARRA 600-286-PL - Soil		SAF NO.: F11-013	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-807-16.4	ACTUAL SAMPLE DEPTH: 0-12 inches	COA: 302222E510	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, 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	Cool~4C	None	None
HOLDING TIME			28 Days	30 Days	1 yr/1 yr	6 Months	6 Months
TYPE OF CONTAINER			G/P	G/P	aG	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)			1	1	1	1	1
VOLUME			120mL	60ml	250ml	500mL	120mL
SAMPLE ANALYSIS			SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Chromate Free - 7196 (Residual Chromate)	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (4) IN SPECIAL INSTRUCTIONS
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B29B44 6C8	SOIL	NOV 18 2010	1214	X	X	X	X	X

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: CHPRC	DATE/TIME: NOV 18 2010 1415	RECEIVED BY/STORED IN: [illegible]	DATE/TIME: NOV 18 2010 1415	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
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	

ORIGINAL

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

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-013-023	PAGE 2 OF 2
COLLECTOR KC Patterson GHPRC	COMPANY CONTACT WIDRIG, DI	TELEPHONE NO. 376-2858	PROJECT COORDINATOR WIDRIG, DI	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 600-283 V 0	PROJECT DESIGNATION ARRA 600-286-PI - 951		SAF NO. F11-013	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-607-16.4	ACTUAL SAMPLE DEPTH 0-12 inches	COA 302222ES10	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 CACN for all analytical work at WSCF is 401352ES2U.

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

* The laboratory shall report only the requested constituents of concern in all final data reports, and EDDs. QC results for non-requested constituents need not be reported, but samples chosen for matrix spike, and all spike compounds shall be identified in the final data report case narrative. No TICs shall be reported.
(1) 200.8_HG - ICPMS {Mercury}; ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Manganese, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Lead, Thorium};
(2) PCBs - 8082 {Aroclor 1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260, Aroclor-1262, Aroclor-1268};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(4) Americium-241 {Americium-241}; Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235, Uranium-238}; Strontium-89,90 -- Total Sr {Total beta radiostrontium}; Technetium-99 {Technetium-99};

ORIGINAL

A-6003-618 (REV 2)

Thursday, November 18, 2010 7:37:36 PM
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ChemWare

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-013-034	PAGE 1 OF 2
COLLECTOR: KC Patterson, CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 600-286 V-8 Dup	PROJECT DESIGNATION: ARRA 600-286-PL - Soil		SAF NO.: F11-013	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-807-14.4	ACTUAL SAMPLE DEPTH: 0-12 inches	COA: 302222ES10	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, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Materials 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

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	PRESERVATION	HOLDING TIME	TYPE OF CONTAINER	NO. OF CONTAINER(S)	VOLUME	SAMPLE ANALYSIS
				Cool-4C	28 Days	G/P	1	120mL	SEE ITEM (1) IN SPECIAL INSTRUCTIONS
				Cool-4C	30 Days	G/P	1	60mL	Chromium Hex - 7196 (Hexavalent Chromium)
				Cool-4C	1 yr/1 yr	oG	1	250mL	SEE ITEM (2) IN SPECIAL INSTRUCTIONS
				None	6 Months	Square Bottle - Poly	1	500mL	SEE ITEM (3) IN SPECIAL INSTRUCTIONS
				None	6 Months	G/P	1	120mL	SEE ITEM (4) IN SPECIAL INSTRUCTIONS
B29B45	009	SOIL	NOV 18 2010	1214	X	X	X	X	X

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: KC Patterson CHPRC	DATE/TIME: NOV 18 2010 1415	RECEIVED BY/STORED IN: [signature]	DATE/TIME: NOV 18 2010 1415	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

A-6003-618 (REV 2)

CH2MHILL Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-013-024	PAGE 2 OF 2
COLLECTOR KC Patterson CHPRC	COMPANY CONTACT WIDRIG, DI	TELEPHONE NO. 376-2839	PROJECT COORDINATOR WIDRIG, DI	PRICE CODE BC AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 600 286 V-8 Dup	PROJECT DESIGNATION ARRA 600 286 PL - Soil		SAF NO. F11 013		
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-507-16.4	ACTUAL SAMPLE DEPTH 0-12 inches	COA 302222ES10	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 CACN for all analytical work at WSCF is 401352ES20.
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

* The laboratory shall report only the requested constituents of concern in all final data reports, and EDDs. QC results for non-requested constituents need not be reported, but samples chosen for matrix spike, and all spike compounds shall be identified in the final data report case narrative. No TICs shall be reported.
(1) 200.8_HG - ICPMS (Mercury); ICP/MS - 200.8 (TAI) (Antimony, Barium, Cadmium, Chromium, Manganese, Zinc); ICP/MS - 200.8 (Add-on) (Arsenic, Lead, Thorium);
(2) PCBs - 8082 (Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260, Aroclor-1262, Aroclor-1268);
(3) Gamma Spectroscopy (Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155);
(4) Americium-241 (Americium-241); Isotopic Plutonium (Plutonium-238, Plutonium-239/240); Isotopic Uranium (Uranium-233/234, Uranium-235, Uranium-238); Strontium-89,90 - Total Sr (Total beta radiostrontium); Technetium-99 (Technetium-99);

A-6003-616 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-013-025

PAGE 1 OF 2

COLLECTOR: KC Patterson CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 375-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE:	BC	DATA TURNAROUND: 15 Days / 15 Days	
SAMPLING LOCATION: 600-286 In-Process Sample 1	PROJECT DESIGNATION: ARRA 600-286-PL - Soil	SAF NO.: F11-013	AIR QUALITY ☐
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-116-4	ACTUAL SAMPLE DEPTH: inches 0-12	COA: 322222E510
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, 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	Cool-4C	None	None
HOLDING TIME	28 Days	30 Days	1 yr/1 yr	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	aG	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	120-ml	60ml	250ml	500ml	120ml
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Uranium Mod - 7196 Dissolved Chromium	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (4) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B29B46 010	SOIL	NOV 18 2010	1113	X	X	X	X	X

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: KC Patterson CHPRC	DATE/TIME: NOV 18 2010 1415	RECEIVED BY/STORED IN: [signature]	DATE/TIME: NOV 18 2010 1415
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

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

A 6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-013-038	PAGE 2 OF 2
COLLECTOR: KC Patterson, CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 375-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 600-286 In-Process Sample 1	PROJECT DESIGNATION: ARRA 600-286-P_ - Soil		SAF NO.: F11-013	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-807-16-4	ACTUAL SAMPLE DEPTH: 0-12 inches	COA: 302222ES10	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 CACN for all analytical work at WSCF is 401352ES20.
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

* The laboratory shall report only the requested constituents of concern in all final data reports, and EDDs. QC results for non-requested constituents need not be reported, but samples chosen for matrix spike, and all spike compounds shall be identified in the final data report case narrative. No TICs shall be reported.
(1) 200.8_HG - ICPMS {Mercury}; ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Manganese, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Lead, Thorium};
(2) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260, Aroclor-1262, Aroclor-1268};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(4) Americium-241 {Americium-241}; Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235, Uranium-238}; Strontium-89,90 – Total Sr {Total beta radiostrontium}; Technetium-99 {Technetium-99};

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-013-026	PAGE 1 OF 2
COLLECTOR: KC Patterson, CHPRC	COMPANY CONTACT: WIDRIG, DI	TELEPHONE NO.: 375-2858	PROJECT COORDINATOR: WIDRIG, DI	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 600-286 In-Process Sample 2	PROJECT DESIGNATION: ARRA 600-286-PI - Soil		SAF NO.: F11-013	AIR QUALITY:	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-16.4	ACTUAL SAMPLE DEPTH: 0-12 inches	COA: 302232ES10	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, 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	Cool-4C	None	None
HOLDING TIME	28 Days	30 Days	1 yr/1 yr	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	oil	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	120mL	60mL	250mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7199 (Hexavalent Chromium)	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (4) IN SPECIAL INSTRUCTIONS

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME					
B29B47	011	SOIL	NOV 18 2010	1122	X	X	X	X	X

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/ REMOVED FROM: KC Patterson CHPRC	DATE/TIME: NOV 18 2010 1615	RECEIVED BY/STORED IN: [signature]	DATE/TIME: NOV 18 2010 1615	SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
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	

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

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-013-026	PAGE 2 OF 2
COLLECTOR: KC Patterson CH2MHC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-3050	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 600-236 In-Process Sample 2	PROJECT DESIGNATION: ARRA 600-288-PL - Soil		SAP NO.: F11-013	AIR QUALITY	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-16.4	ACTUAL SAMPLE DEPTH: 0 1/2 inches	COA: 302222ES10	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 CACN for all analytical work at WSCF is 401352ES20.
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

* The laboratory shall report only the requested constituents of concern in all final data reports, and EDDs. QC results for non-requested constituents need not be reported, but samples chosen for matrix spike, and all spike compounds shall be identified in the final data report case narrative. No TICs shall be reported.
(1) 200.8_HG - ICPMS {Mercury}; ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Manganese, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Lead, Thorium};
(2) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260, Aroclor-1262, Aroclor-1268};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(4) Americium-241 {Americium-241}; Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235, Uranium-238}; Strontium-89,90 -- Total Sr {Total beta radiostrontium}; Technetium-99 {Technetium-99};

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-013-027	PAGE 1 OF 2
COLLECTOR: KC Patterson, CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 10 Days
SAMPLING LOCATION: 600 286 In Process Sample 3	PROJECT DESIGNATION: ARRA 600-286-PL - Soil		SAF NO.: F11-013	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-14.4	ACTUAL SAMPLE DEPTH: 0-12 inches	COA: 3022228510	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, 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 / DATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	Cool~4C	Cool~4C	None	None
HOLDING TIME	28 Days	28 Days	1 yr/1 yr	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	aG	Square Ziplock - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	120mL	60mL	250mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Chromium Hex - FIXR (Preservative Chemical)	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (4) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B29B48	DL	SOIL	NOV 18 2010	1130	X	X	X	X	X

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: KC Patterson CHPRC	DATE/TIME: NOV 18 2010 1115	RECEIVED BY/STORED IN: [signature]	DATE/TIME: NOV 18 2010 1115
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

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

A-6001-619 (REV 2)

CH2MHILL Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-013-027	PAGE 2 OF 2
COLLECTOR: KC Patterson CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: BC	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 600-286 In-Process Sample 3	PROJECT DESIGNATION: ARRA 600-286-PL - Soil		SAF NO.: F11-013	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: ~~HNF-N-807-~~ 116-4	ACTUAL SAMPLE DEPTH: 0-12 inches	COA: 302222ES10	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 CACN for all analytical work at WSCF is 401352FS20.
** The 200 Area SB&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF

* The laboratory shall report only the requested constituents of concern in all final data reports, and EDDs. QC results for non-requested constituents need not be reported, but samples chosen for matrix spike, and all spike compounds shall be identified in the final data report case narrative. No TICs shall be reported.
(1) 200.8_HG - ICPMS {Mercury}; ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Manganese, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Lead, Thorium};
(2) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor 1248, Aroclor 1254, Aroclor-1260, Aroclor-1262, Aroclor-1268};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(4) Americium-241 {Americium-241}; Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235, Uranium-238}; Strontium-89,90 – Total Sr {Total beta radiostrontium}; Technetium-99 {Technetium-99};

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-013-030

PAGE 1 OF 2

COLLECTOR: KC Patterson CHPRC	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL
PRICE CODE: 8C	DATA TURNAROUND: 15 Days / 15 Days		
SAMPLING LOCATION: 400-286 In-Process Sample 4	PROJECT DESIGNATION: ARRA 600-286-PL - Soil	SAP NO.: F11-013	AIR QUALITY: ☐
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-16.4	ACTUAL SAMPLE DEPTH: 0-12 inches	COA: 302222ES10
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-4C	Cool-4C	Cool-4C	None	None
HOLDING TIME	28 Days	14 Days	1 yr/1 yr	6 Months	6 Months
TYPE OF CONTAINER	G/P	G/P	AG	Square Bottle - Poly	G/P
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	120mL	60mL	250mL	500mL	120mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Cleanup Mix - 7196 (Hexavalent Chromium)	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (4) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B29B49 013	SOIL	NOV 18 2010	1155	X	X	X	X	X

CHAIN OF POSSESSION — SIGN / PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
KC Patterson CHPRC	NOV 18 2010		NOV 18 2010 1415
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

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

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-013-028	PAGE 2 OF 2
COLLECTOR KC Patterson CHPRC	COMPANY CONTACT WIDRIG, DL	TELEPHONE NO. 376-2958	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 600-286 In-Process Sample 4	PROJECT DESIGNATION ARRA 600-286-PL - Soil		SAF NO. F11-013	AIR QUALITY ☐	
ICF CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-607-16-4	ACTUAL SAMPLE DEPTH 0-12 inches	COA 302222ES20	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 CACN for all analytical work at WSCF is 401352ES20.
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

* The laboratory shall report only the requested constituents of concern in all final data reports, and EDDs. QC results for non-requested constituents need not be reported, but samples chosen for matrix spike, and all spike compounds shall be identified in the final data report case narrative. No TICs shall be reported.
(1) 200.8_HG - ICPMS {Mercury}; ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Manganese, Zinc}; ICP/MS - 200.8 (Add-on) {Arsenic, Lead, Thorium};
(2) PCBs - 8082 {Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260, Aroclor-1262, Aroclor-1268};
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155};
(4) Americium-241 {Americium-241}; Isotopic Plutonium {Plutonium-238, Plutonium-239/240}; Isotopic Uranium {Uranium-233/234, Uranium-235, Uranium-238}; Strontium-89,90 -- Total Sr {Total beta radiostrontium}; Technetium-99 {Technetium-99};

A-6003-818 (REV 2)